

ARBITRATION LAB | LONDON SUMMER ARBITRATION SCHOOL

19 June 2025

Arbitration in the Digital Economy

Dr. Gérardine Goh Escolar

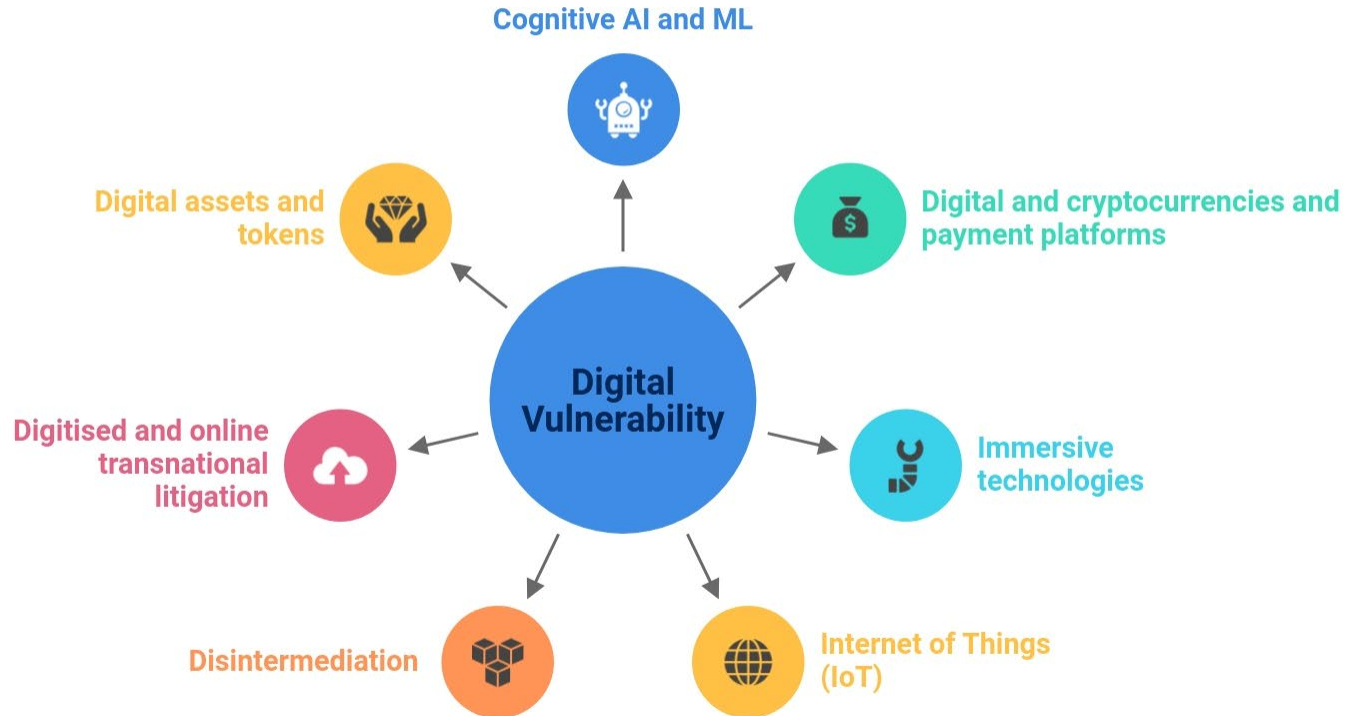
Professor (Adj), Faculty of Law

*Academic Fellow, Centre for Technology, Robotics
and the Law (TRAIL)*

National University of Singapore



New Legal Issues around the Digital Economy





Pseudonymity of users
and decentralised
nature of the ledger



Relationship between participants in a networked but decentralised, disintermediated system





Holding and transacting
of digital assets and
tokens





Contractual and proprietary effects of digital assets towards third parties





Disputes related to the outcomes of self-executing automated contracts deployed on distributed systems and DLT-based dispute resolution

Intermediaries and Novel Legal Issues



Sui generis characterisation



Which forum has jurisdiction over intermediaries?



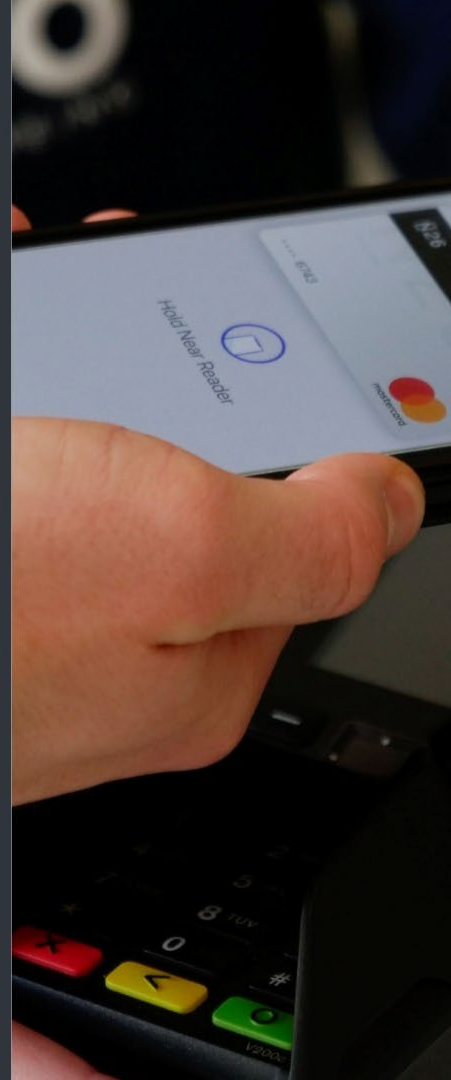
Difficulties with traditional connecting and other legal factors



How will awards involving intermediaries be recognised and enforced in different jurisdictions?



(Dis)-Intermediation and applicable law matters



Digital and Tokenised Economy



Determining the law applicable in respect of a digital asset or token



Contractual aspects: Characterisation, party autonomy



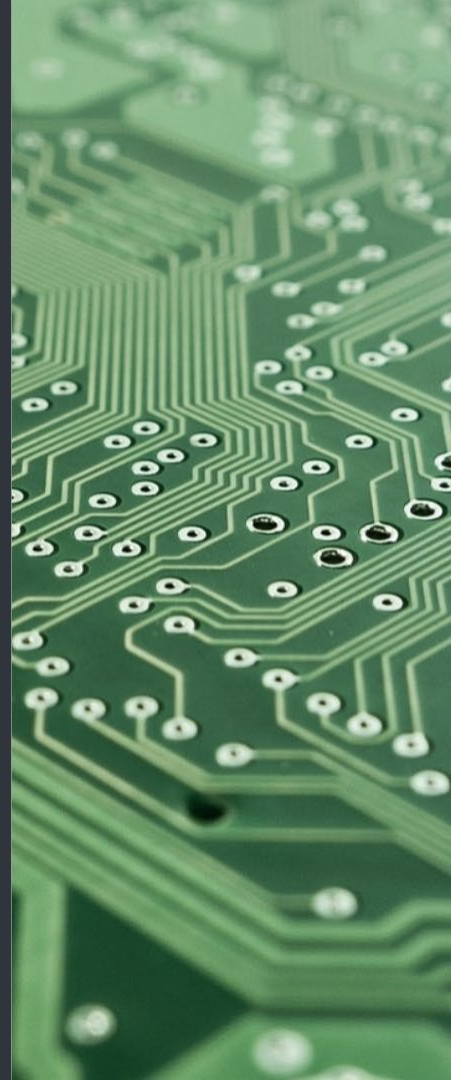
Substantive matters relating to applicable law: Linked assets, digital twins/triplets, SBTs, novel assets



Jurisdiction, Recognition and Enforcement



Connecting Factors



Intellectual Property in the Digital Economy

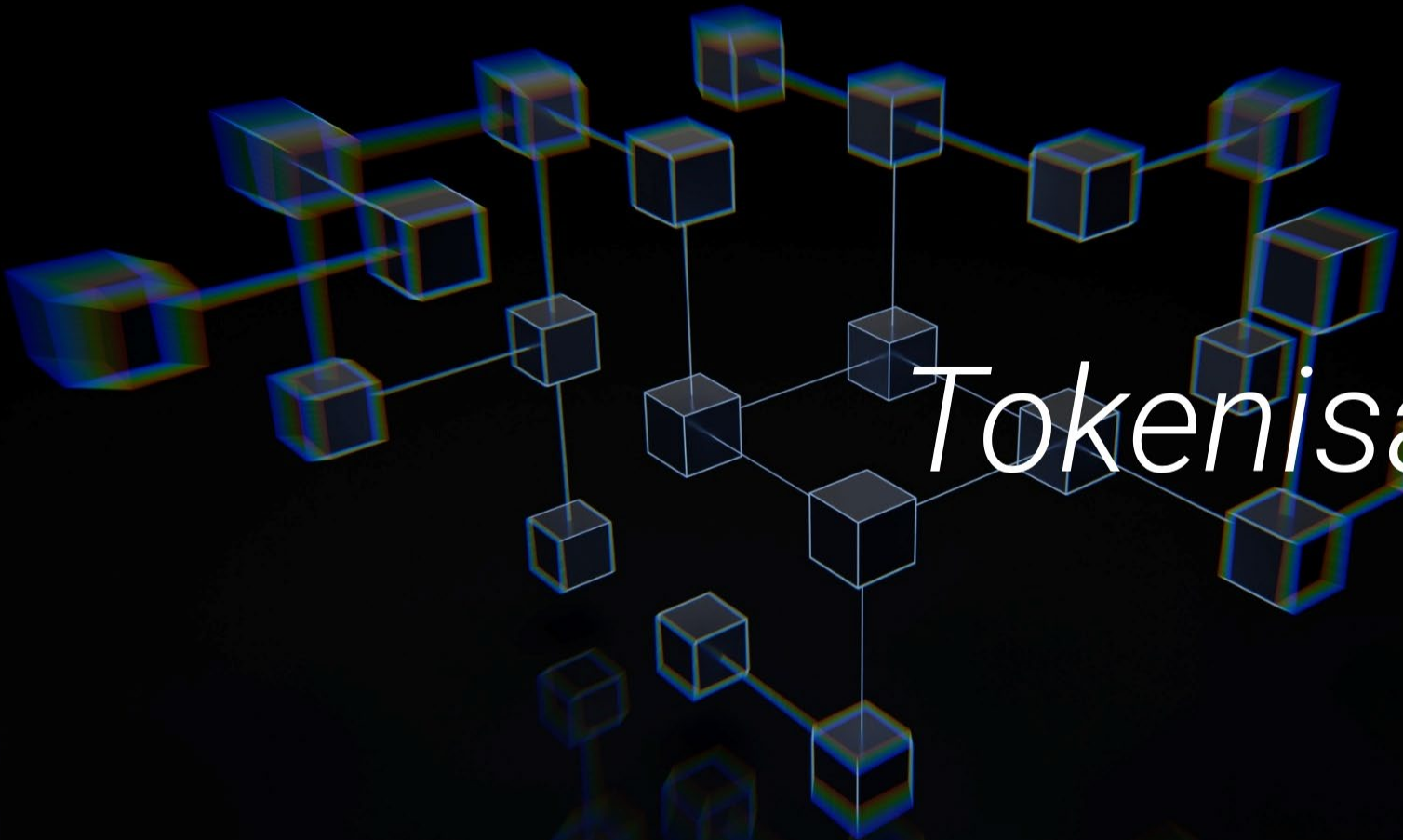
- 1 Big Data and Large Language Models (LLMs)
- 2 Artificial Intelligence (AI): national approaches to IP protection, cross-border differences on ownership of AI-generated inventions
- 3 Non-Fungible Tokens (NFTs): Characterisation, law applicable, challenges relating to linked assets



Decentralised Autonomous Organisations (DAOs)

- 1 whether regulated DAOs can be recognised in other States
- 2 whether maverick DAOs have legal existence in various jurisdictions
- 3 what law is applicable to a maverick DAO
- 4 Whether DAOs comply with securities laws





Tokenisation



Tokenisation of real-world assets

virtual representation of existing tangible
assets



Fund tokenisation

tokenised units representing investor interests



Case Study: Tokenisation in the Carbon Markets

Character of public goods and the raising of
capital for climate justice

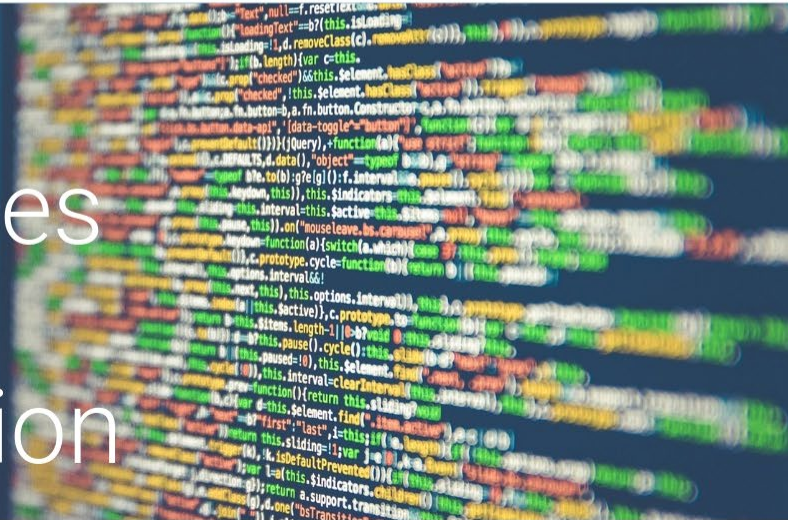
localisation

traditional
connecting
factors

variety of actors
and
participants

domestic
substantive law

different
approaches
to
tokenisation



A high-angle, close-up photograph of a person's hands typing on a silver laptop keyboard. The person is wearing a white, ribbed sweater. The laptop screen is open and shows a faint grid pattern. The background is a plain white surface. Overlaid on the right side of the image is the text "Contracting on Digital Platforms" in a white, serif font.

*Contracting
on Digital
Platforms*



Relationship between the platform and the user

Typically relies on choice of law clauses, but questions arise about tortious matters, consequences where there is no valid choice of law, and the protection of weaker parties





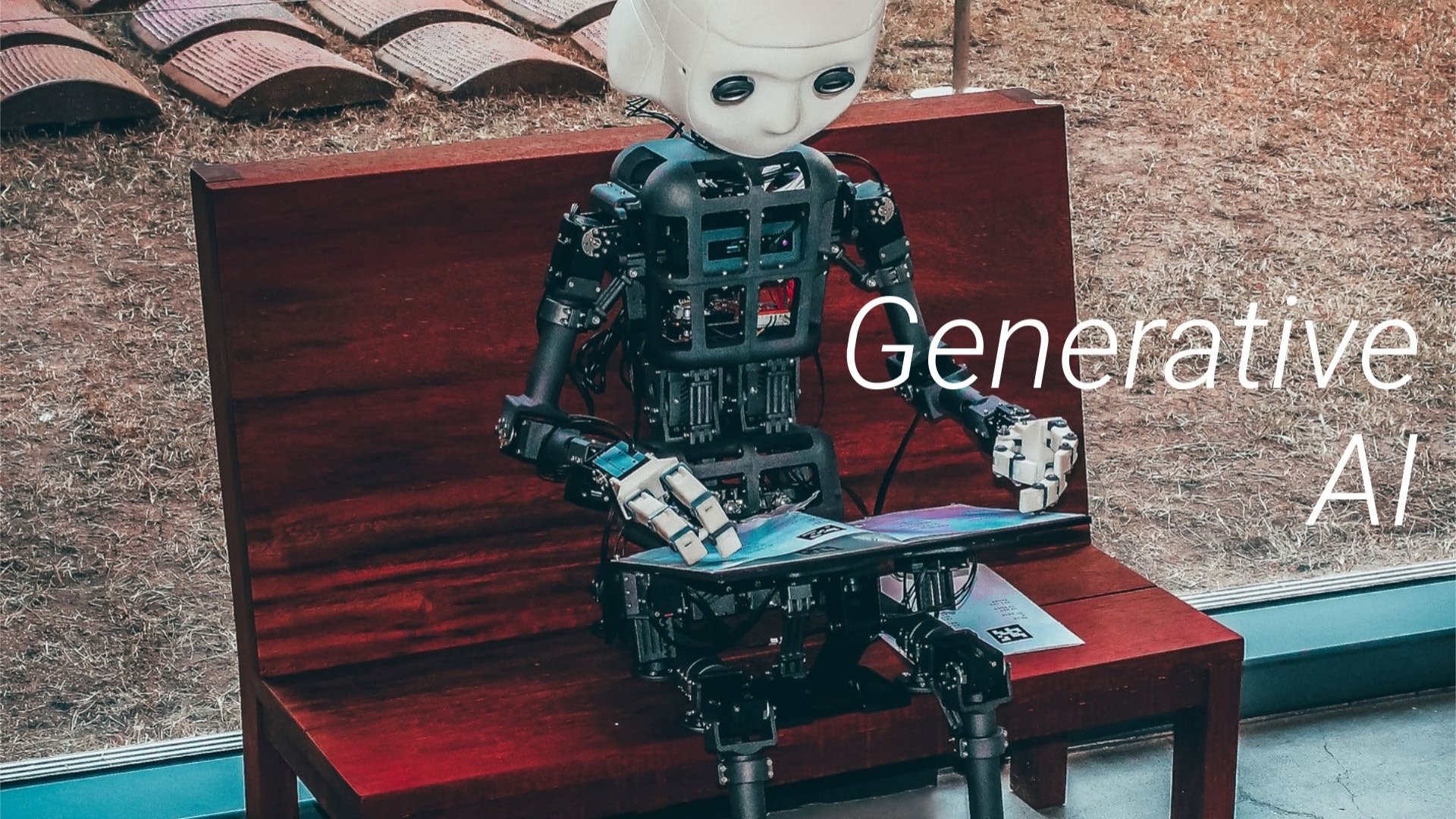
Relationship between users

Questions arise where there is no valid choice of law, as is often the case in peer-to-peer digital environments



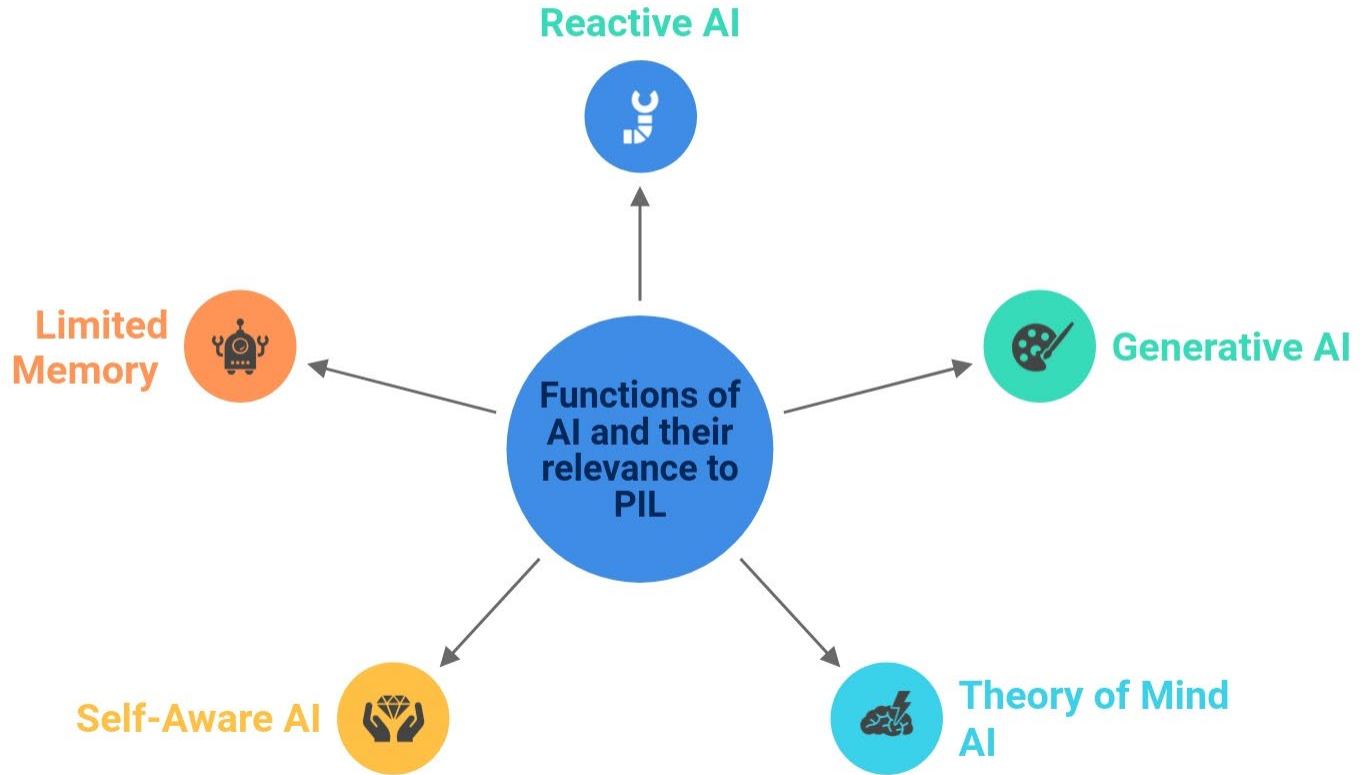
Relationship between the platform and / or its user, and the non-user

Where there is no pre-existing relationship between these parties: questions arise about harm to non-user and the law applicable to the determination of the liability of intermediaries



Generative AI

Types of AI and their Relevance to Arbitration





Public Policy and Overriding Mandatory Rules

Regulations, public policy, limits to party
autonomy in contracting





Jurisdiction

When AI-driven technologies perform acts or take part in transactions, the online nature of AI-driven systems give rise to the challenges in determining location in online platforms

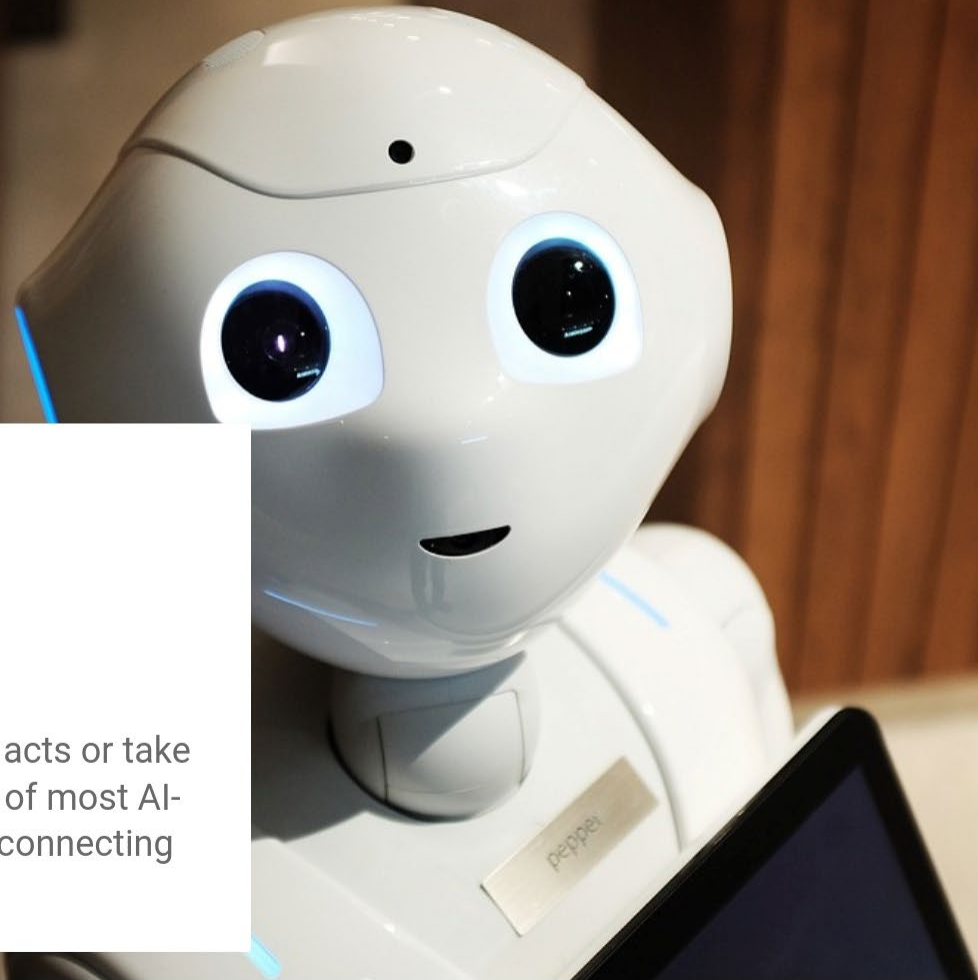
Another challenge relates to the identification of the type of harm that an AI-driven system may cause, and to the localisation of such harm, since traditionally situs-based PIL connecting factors may not be useful





Applicable Law

When AI-driven technologies perform acts or take part in transactions, the online nature of most AI-driven systems may make traditional connecting factors difficult to apply





Connecting Factors

Do traditional objective connecting factors continue to apply? How do traditional considerations such as *situs*, governing law and habitual residence interact with the use of AI-driven systems?



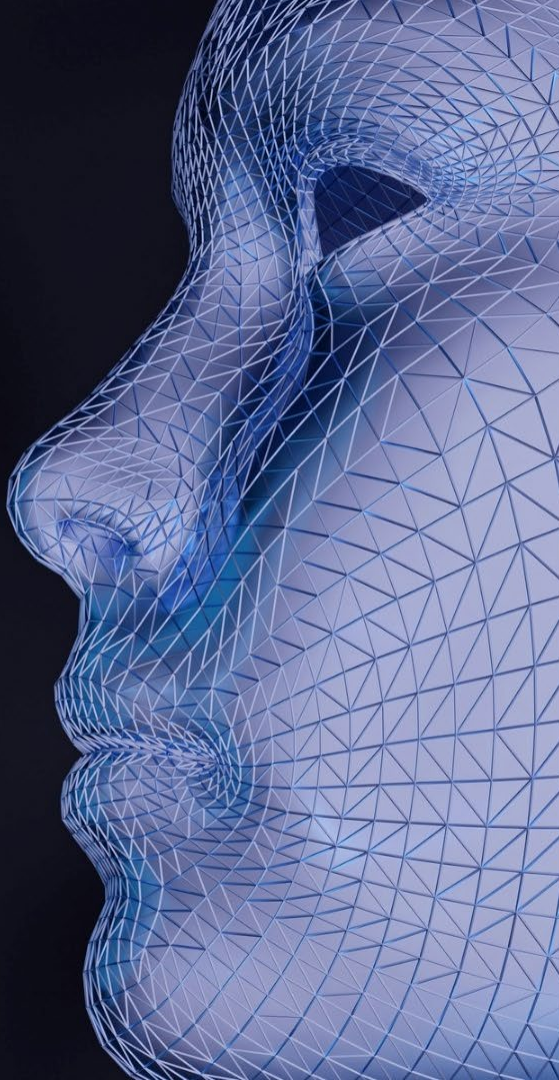
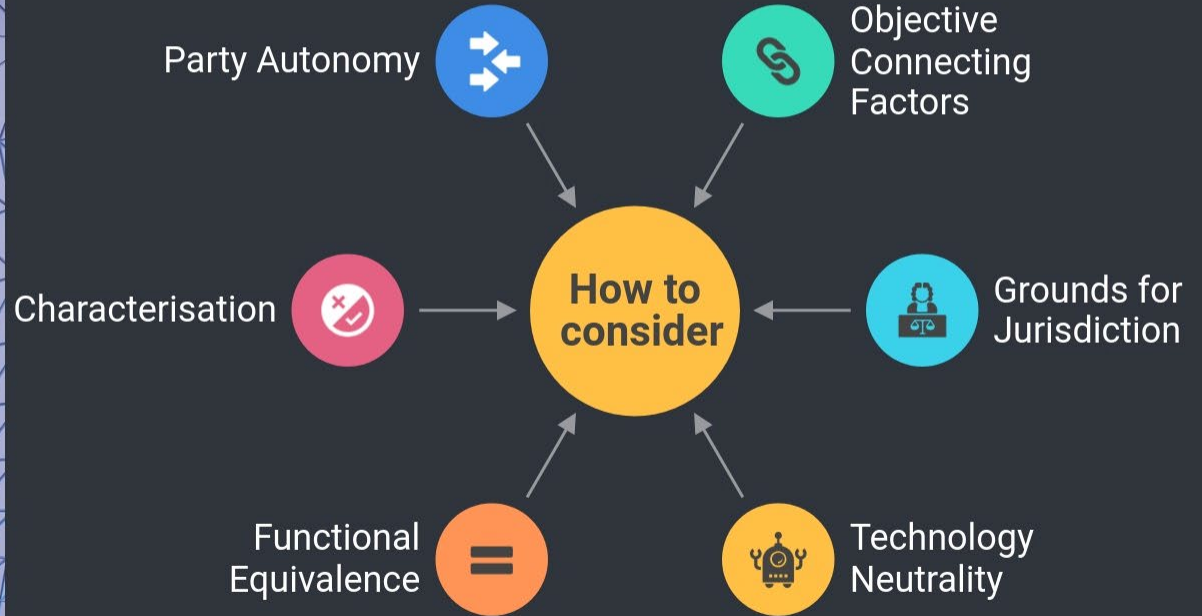


Recognition and Enforcement

The enforcement of foreign judgments may be challenging as a result of various jurisdictions' approaches to AI-driven systems, which may see public policy and other concerns presenting obstacles to the recognition and enforcement of decisions and judgments both in situations where AI-driven algorithms and tools are partially involved, and where they are empowered to render final decisions



Challenges posed by AI



Characterising Types of Harm



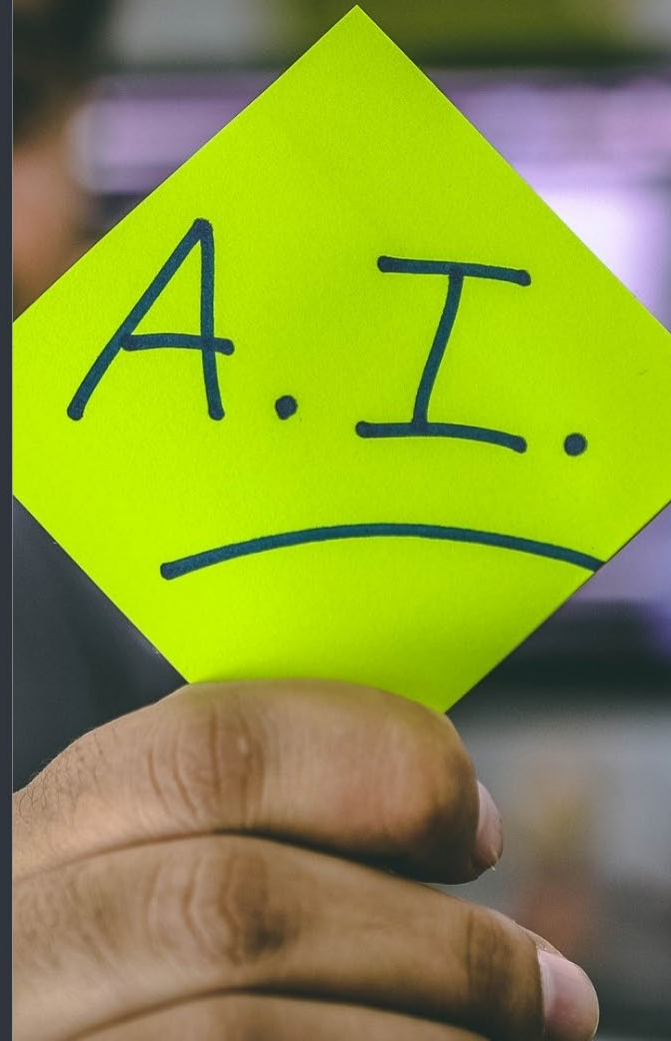
Real-world vs
Virtual



Tangibility



Causes of harm





JOIN US ONLINE.

sunday at 10am | 3pm | 6pm
christianworshipcenter.com
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Rise of
Online
Dispute
Resolution
(ODR)

1 Increased mobile workspaces

2 Increased networked connectivity

3 Increased costs of travel

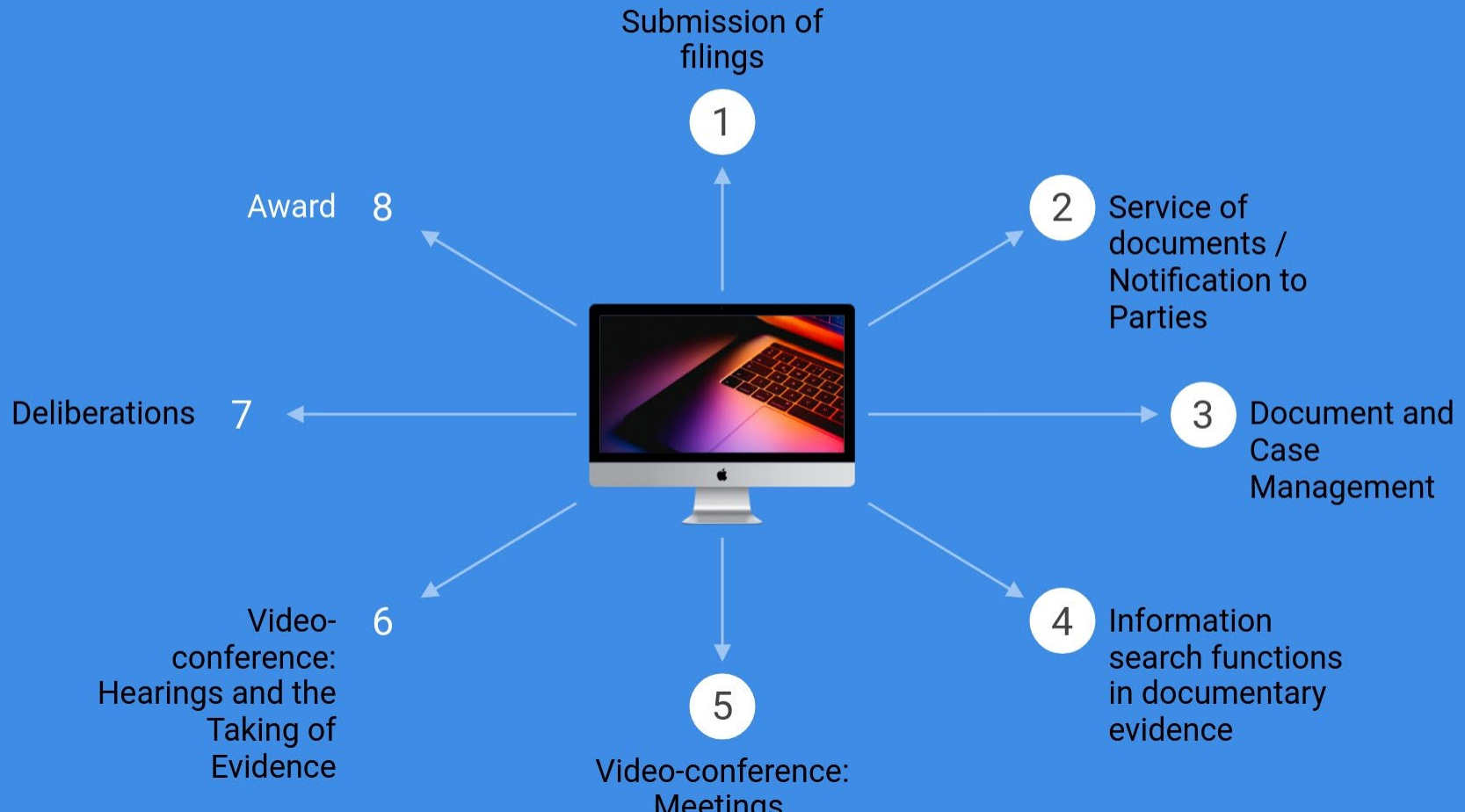
4 Internet arbitration systems

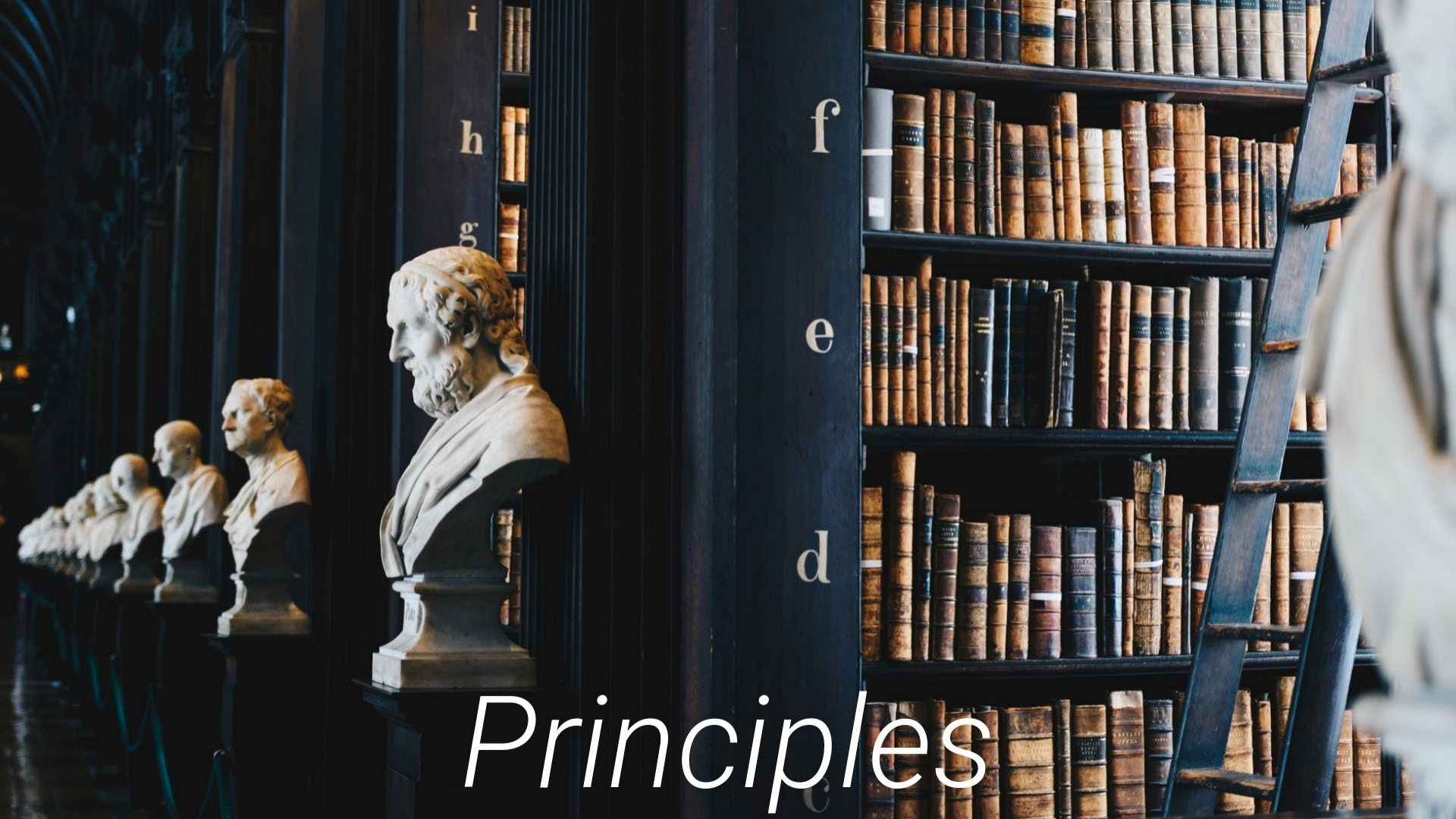




Use of
technology
in
arbitration
proceedings

Technology in arbitration procedures

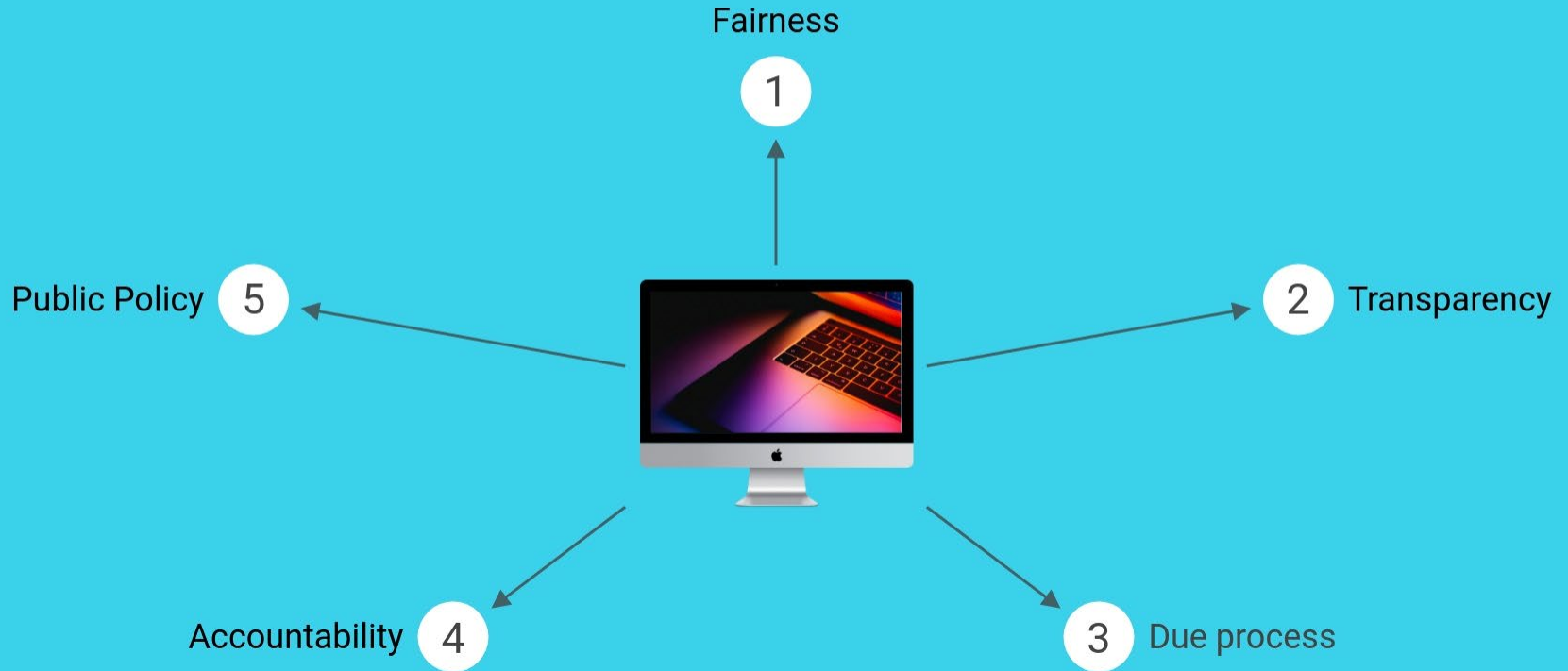




Principles

Principles safeguarding arbitration procedures

See UNCITRAL Technical Notes on ODR



Issues to consider in online arbitration

- Access to arbitration
- Costs associated with initiating arbitration proceedings or in pre-arbitration procedures
- The requirement of physical presence to initiate or participate in arbitration
- Which law is applicable
- How to enforce a decision





*Service of
Documents*

*/
Notifications
to Parties*

Specific Considerations for Arbitration

Service of Documents / Notification to Parties



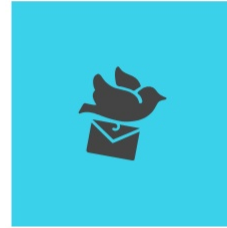
Whether electronic service embedded in parties' agreement to arbitrate

Public policy vs Party
Autonomy



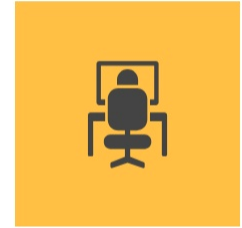
Whether institutional rules allow for electronic service

Arbitration Framework



Evidence of delivery of service

- ✓ Tracking
- ✓ "Delivered" vs "read"
- ✓ Bounce back



Service via electronic platform

- ✓ Terms and conditions of platform
- ✓ Relationships on platform
- ✓ Authenticity
- ✓ Public vs private nature of communication

Service of injunction order by text message

NPV v QEL and Anor [2018] EWHC 703 (QB) High Court of England and Wales

... Mr Justice Nicklin permitted the service of the injunction through text message on the grounds that the claimant only had D's phone number and it was the 'only practical alternative means presently available' in which NPV would be able to serve D if said meeting set for the next day did not take place. ...



Service of Judgment in Default on Social Media: Facebook Messenger



MKM Capital Property Limited v Corbo and Poyser, No. 608 of 2008 (Australian Capital Territory Supreme Court)

... The court was provided with a printout of the Facebook page of D, wherein the judge determined reasonable to alert the defendants and ordered substituted service to be done by way of a private message via said Facebook pages to inform the first and second defendants of the entry and terms of the default judgement ...

Service of Order of Injunction by Social Media: Twitter



Blaney v. Persons Unknown (October 2009) (Chancery Division of English Courts)

Mr Justice Lewison granted the injunction sought and permitted the substituted service via Twitter on the ground that the defendant was anonymous and difficult to identify; the offending Twitter page through which service was to be effected belonged to and was regularly visited by the defendant; and it was possible to monitor on Twitter whether the defendant had received the injunction.

Service of Order of Injunction on Social Media: Facebook Messenger



Zhuhai Gotech Intelligent Technology Co Ltd v. Persons Unknown (HCZZ 10/2020) Court of First Instance of Hong Kong SAR

... L. Wong J in making the order accepted Order 65, r.4(3), Rules of the High Court (“RHC”) could be construed as providing the Court with jurisdiction to make an order of substituted service by electronic means, even in the absence of express wording ...

Service of Interim Injunction Order by QR Code posted in public area



Airport Authority v Persons Unlawfully and Wilfully Instance Obstructing or Interfering with the Proper Use of the Hong Kong International Airport [2020] HKCFI 2743

Mr Justice Coleman opined that in an appropriate case, the use of QR code as a means of effecting substituted service of court documents can be an effective and proportionate way of achieving the aim of likely bringing the documents to the attention of those to whom attention is to be drawn. In particular, this method may seem particularly suited to

- (1) cases with large numbers of defendants or potential defendants, or
- (2) where there is a significant volume of documents to be served.

Service of documents including affidavits and exhibits via data room



Hwang Joon Sang & Anor v. Golden Electronics Inc & Ors
(HCA 1529/2019; [2020] HKCFI 1084) Court of First
Instance of Hong Kong SAR

The Court decided to allow service by online data room as there were numerous Defendants in the action and further Defendants were likely to be added as a result of the Plaintiffs' tracing of assets, and there was a substantial body of material in the form of affidavits, exhibits and previous court orders and there would likely be more added.

Service of Process by NFT Airdrop



D' Aloia v Persons Unknown & Others [2022] 1723 (Ch) EWHC High Court of England and Wales

- The court found that: the defendants were outside the court's jurisdiction (Thailand, the Cayman Islands, Panama, and Seychelles) and the defendants were most likely outside the jurisdiction of the court as they were anonymous creators of website
- The court found that it was only apt to allow for service by way of NFT, as 'the difficulties that would otherwise arise and the complexities in relation to service on the first defendant mean that good reason has been shown.'

Service of Process against "persons unknown"

Issues in relation to initiating procedures
against persons unknown

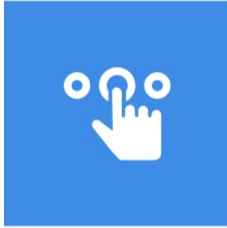
- Japan
- Scotland





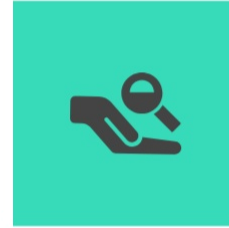
*Documentation
and Case
Management
Systems*

Documentation and Case Management Systems



Use of online case management systems

- ✓ Criteria: Platforms must be trustworthy, accessible, fair
- ✓ Issues of data protection and security



Information search functions in documentary evidence

- ✓ Accuracy of search
- ✓ Thoroughness of search
- ✓ LLMs and AI: Hallucinations

Hearings



Hearings by Video-link: Evidence and Pleadings

1 Use of Video-link for the taking of evidence under domestic law

2 Direct vs indirect taking of evidence

3 Protocols and procedures: Technical difficulties

4 Use of documents and exhibits

5 Identification and consent of the witness

6 Expert vs fact witnesses

7 Coercive measures and compulsion

8 Technical support and adequacy of equipment, software and connectivity

9 Interpretation

Taking of Evidence by Video-Link

Kimathi & Ors v. Foreign and Commonwealth Office [2015] EWHC 3684 (QB)

- The High Court of Justice (England and Wales) in the United Kingdom has held that it did not consider the potential disadvantages of video-link (e.g., limits to the assessment of credibility) to be any further exacerbated purely by virtue of the use of the technology with respect to vulnerable witnesses or those requiring interpretation.





Credibility of Witnesses on Video-Link

Video-link found as not having a significant impact on the assessment of credibility

- *In re Rand International Leisure Products, LLC*, No.10- 71497-ast, 2010 WL 2507634, at *4 (Bankr. E.D.N.Y. 16 June 2010) (Bankruptcy Court Eastern District of New York, United States) which found only a limited discernible impact of video-link technology on the ability to observe a witness' demeanour and to cross-examine;
- *Skyrun Light Industry (Hong Kong) Co Ltd v. Swift Resources Ltd* [2017] HKEC 1239 (Court of First Instance, Hong Kong SAR), noting that although there may be some impairment, there is nothing inherently unfair about the use of video- link to interrogate a witness.
- *State of Maharashtra v. Dr Praful B Desai* AIR 2003 SC KANT 2053 (Supreme Court of India), taking the view that when the technology works effectively, credibility can be assessed adequately.



Use of documents and exhibits

Video-link found as not having a significant impact on the use of documents and exhibits

- *Federal Commissioner of Taxation v. Grbich* (1993) 25 ATR 516, where the Federal Court of Australia stated that providing a document bundle to the witness ahead of the examination eliminates “procedural hurdles to conducting a sound interrogation in court”.
- United Kingdom Ministry of Justice, *Practice Direction 32 – Evidence*, Annex 3 “Video Conferencing Guidance”, p. 18: where a document camera is to be used, the parties must inform the panel operator of the number and size of documents or objects



Technical support and adequacy of equipment, software and connectivity

London Borough of Islington v. M, R
(represented by his guardian) [2017] EWHC
364 (Fam)

where the High Court of Justice of England and Wales (Family Division) (United Kingdom) emphasised the importance of testing the video-link equipment before the hearing



Interpretation

Stuke v. ROST Capital Group Pty Ltd
[2012] FCA1097

where the Federal Court of Australia was hesitant to permit the use of video-link to obtain evidence from a witness who required interpretation where the evidence related to a contentious or critical issue of fact.



Legal issues in the use of digital technologies in hearings: Fairness

Song Lihua v. Lee Chee Hon [2023] HKCFI 1954

- Application to set aside an award granted by the Chengdu Arbitration Commission
- Arbitrator's conduct vitiated the fairness of the proceedings
- “Fully-virtual” hearings not an issue in itself



Legal issues in the use of digital technologies in hearings: Fairness

Sky Power Construction Engineering Ltd v Iraero Airlines JSC [2023] HKCFI 1558

- Application to set aside an award because proceedings were fully online
- Remote proceedings acceptable if legislative framework allows for it
- Technical difficulties would be suffered by both parties

Tribunal should consider whether

- (1) it would be appropriate to permit factual witnesses to give evidence remotely,
- (2) whether the effectiveness of cross-examination could be / was undermined,
- (3) whether appropriate measures are required to ensure the security of the process.



Awards



Recognition and Enforcement of Electronic Arbitral Awards

Advantages: Efficiency, convenience, low-cost, environmental considerations, timeliness, integrity

Disadvantages: Lack of certainty, technological divide, issues relating to unenforceability

- See ICC Commission Report on IT in International Arbitration (2022): “For the time being, original awards probably should continue to be made and signed on paper and physically served on the parties.”

Increasing enforcement of electronic judgments

E.g. China CPL Art 90, from 1 Jan 2022, judgments can be delivered by electronic means if parties give consent

Criteria as to successful delivery of electronic judgments: Electronic judgment considered to have delivered successfully to recipient if

- Sent to the address provided by the recipient and
- Receipt confirmed by the recipient, Response by the recipient, or system shows that the recipient read the message

Legal effect of electronic judgment same as original

- Copy of the data identical with the original, or a printout directly from the data, deemed to the original e.g. China Civil Evidence Provisions, Art 15(2)
- Proof of authenticity: Electronic seal





Recognition and Enforcement of Electronic Arbitral Awards

Requirement of writing

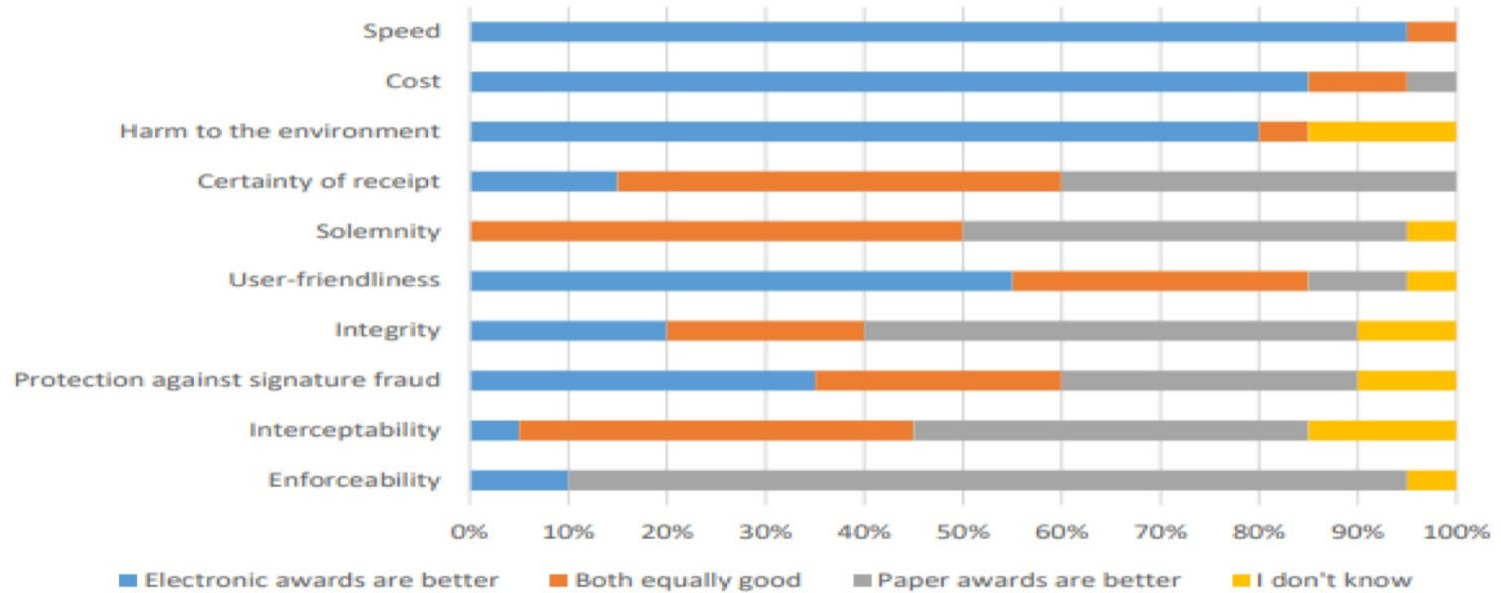
Requirement of parties' signature

Duly authenticated original award

Delivery and time of notification

K. Ongenae, "Electronic arbitral awards:
Yea or Nay", (2023) 40(3) J. Int. Arb. 283

Electronic v. paper award comparisons





Use of Artificial Intelligence

- UNCITRAL “Stocktaking of Developments in Dispute Resolution in the Digital Economy”:

“Due to the confidential, complex and non-repetitive nature of cases in international arbitration, data for AI tend to be insufficient to ensure that AI is able to deliver accurate outcomes and reasons on the disputed issues.”

- While the UNCITRAL texts do not explicitly prohibit machines from arbitrating, provisions in the UNCITRAL Model Law presupposes that arbitrators are natural persons.
- Some jurisdictions require that arbitrators are natural persons e.g. The Netherlands



*New
Technologies*



Safeguards: Are more necessary with new technology?

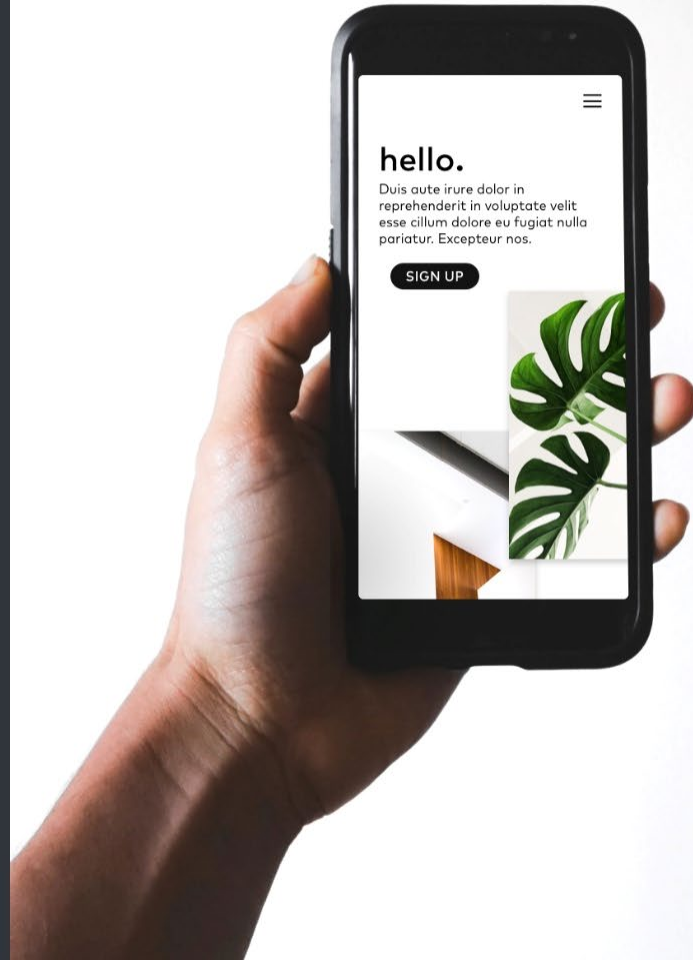
- Immersive Technology
- Tokenised Arbitration
- Arbitrator and Counsel Avatars
- Arbitral Awards on DLT
- Augmented Consumer/User

Contact

 G.GohEscolar@nus.edu.sg

 <https://www.linkedin.com/in/gerardinegoh/>

 @GeriGohEscolar



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