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Introduction

• Technology bound to impact arbitration as main contribution is reduction of costs—better access to justice?

• Blockchain technology was first introduced at the end of the 2000s when Satoshi Nakomoto released his whitepaper on the Bitcoin cryptocurrency.

• Receiving business interest for uses going beyond payment methods.
The Blockchain Process

George wants to buy something from Sue.

A block is created which represents the transaction.

The transaction block is “broadcast” to everybody in the network.

Everybody in the network verifies the transaction.

The verified block is date stamped and linked to the other blocks in the chain.

The purchase goes through. George gets the product from Sue, and Sue receives payment for the product.
What is Blockchain Technology?

• Digital data structure
• The specificity of this technology is that it functions on a decentralised basis-no use of trusted intermediary

• This data structure consists of transactions that are found in blocks that constitute a ledger
• This ledger is copied amongst the members of a network so that these can reach a consensus on how to organise the data and validate it
So What are Smart Contracts?

• It is a software programme that is stored on the blockchain
• Smart contracts were first referred to by Nick Szabo in the 1990s as “a set of promises, specified in digital form, including protocols within which the parties perform on these promises.”
• Software codes that embed the terms and conditions of a transaction and that run on a network leading to a partial or full automated self-execution and self-enforcement of the transaction.
Why Blockchain Arbitration?

- Use of smart contracts in supply chain management:
  - **Self-executing smart contracts** automate commercial agreements by transferring digital assets, updating accounts, and recording key evidence on a blockchain.
  - **Ricardian contract** combines smart contract code with a natural-language contract.
  - An international panel of independent, technically competent arbitrators provides decentralized dispute resolution.
What is Smart Contract Arbitration?

• There is currently no uniform standard arbitration procedure for smart contract arbitration.

• The concept is based on dispute resolution taking place electronically on the blockchain.

• These characteristics mainly relate to the coding of the arbitration agreement and the automation of parts of the procedure.
CodeLegit Arbitration Procedure:

Arbitration Library (Arbitration software protocol in the smart contract)
Smart Contract Arbitration as a Better Forum for Access to Justice in B2B Disputes? A Practical Perspective:

- **Advantages:**
  - Efficient: time and cost.
  - Confidential and secure (immutable).

- **Limitations:**
  - Lack of flexibility (rigid procedure).
  - Data privacy issues.
  - Security issues (hacks).
Application of the NYC to CodeLegit Arbitration Agreement?

• **Form:**

  ➢ **Characteristics:**
  o Arbitral agreement in writing (possible)
  o Otherwise arbitral agreement authenticated in code (digital signature?)

  ➢ **Analysis:**
  o Form ‘agreement in writing’-Art II(2)
  o Wide application intended by NYC (signed or in exchange of letters or telegrams). Also, see Article 7 UNCITRAL Model Law
  o Limitation: Domestic law meaning- Arts II (3), V (1)(a) and IV (1)(b)
  o Example: Norwegian Court of Appeal refused recognition of an award given in London- exchange of emails did not satisfy the writing requirement of Article II (2) of the NYC
Application of the NYC to CodeLegit Arbitration?

- Submission of the Award for recognition (and enforcement?) to national courts:
  - Characteristics:
    - Automated enforcement of the award via the relevant protocol (code)
  - Analysis:
    - Is this in conflict with the NYC? Arts III and IV
    - Is this in conflict with domestic laws re recognition? *E.g.* It is necessary to apply to the court for recognition as a preliminary step in order to enforce the award (France under the Code of Civil Procedure 1981)
Conclusion

- Blockchain-based arbitration as a procedure does bring benefits for access to justice
- Limitations are technical
- Relevant for low value disputes in smart contracts and emergency proceedings
- NYC favourable position towards blockchain-based agreements and awards
- But **main limitation** in domestic legal systems requirements
- Adoption of smart contracts (in supply chain management for e.g.) eventually depends on its adoption by businesses