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The impact of blockchain and smart contracts on dispute settlement: a case for mediation.

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The Impact of Blockchain and Smart Contracts on Dispute Settlement: A Case for Mediation

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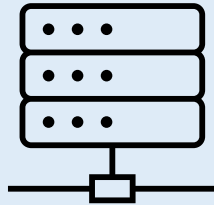
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Blockchain Technology and Smart Contracts in Law

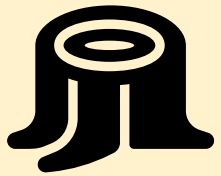
What is Blockchain?

- A 'structured collection of information' used for tracking transactions.
- Ensures data integrity and identity authentication through encryption.
- A 'foundational technology' with applications in various industries.



Types of Blockchains

- Centralised: Single trusted entity, cheaper, flexible, high privacy.
- Decentralised: Data stored in a P2P network, secure but costly.



Smart Contracts

- Self-executing computer programmes that execute contractual terms automatically.
- Debate persists on whether they are legally binding contracts or merely computer codes.



Disputes No More? The Role of Smart Contracts in Dispute Avoidance

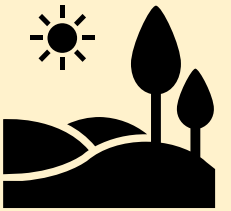
Formulation and Types of Smart Contracts

- Initial Agreement: Parties agree on terms in natural language.
- Translation to Code: A trusted third party translates the terms into a programming language.
- Coding Languages: Source code, machine code, object code, assembly code, etc.
- Types of Transactions: Simple binary transactions benefit most.



Advantages and Limitations

- Deterministic Nature: Reduces the scope for disputes.
- Decentralisation: Leaves little room for interference and ambiguity.
- Conditions-Based: Executes only when specific conditions are met.
- Limitations: Unforeseen occurrences, Coding errors, and Exploitation by malignant actors.



Emerging Legal Framework for Resolving Smart Contract Disputes

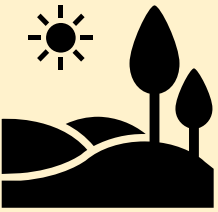
JAMS Smart Contract Protocol

- Developed by JAMS, an institutional ADR provider.
- Aimed at facilitating the use of ADR in blockchain-related disputes.
- Adaptation of existing commercial arbitration and mediation rules.
- Recognises the increasing frequency of smart contracts.



The Digital Dispute Resolution Rules

- Introduced by the UK Jurisdiction Taskforce in April 2021.
- Provides a framework for swift and efficient resolution of blockchain-related disputes.
- Adapts traditional dispute resolution rules for on-chain transactions.
- Utilises technology to foster the resolution process.



Integration of Blockchain and Smart Contracts in Mediation

Advantages of Integration

- **Transparency:** Decentralised ledger technology ensures an immutable record of transactions.
- **Efficiency:** Smart contracts automate contractual obligations, minimising potential for dispute.
- **Security:** Immutable records eliminate the possibility of tampering.



Facilitative and Evaluative Mediation

- **Facilitative Mediation:** Mediator guides the process, parties retain control over the outcome.
- **Evaluative Mediation:** Mediator offers opinions on strengths and weaknesses of each party's case.
- **Application:** Both styles can be enhanced by blockchain and smart contracts.



Blockchain in Mediation Process

Mediator Selection and Process

- Mediator Database: Blockchain maintains a decentralised database of certified mediators.
- Smart Contracts: Automate the agreement signing stage, coding rights and obligations.
- Timestamping: Secure and transparent recording and tracking of all proceedings.



Future Directions and Challenges

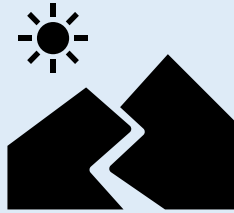
- Multi-Step Resolution: Blockchain adaptable to multi-step processes like arbitration.
- Decentralised Systems: Set for expansion but pose challenges in communal deliberation.
- Regulatory Complexities: Need for global coordination across jurisdictions.



Possible Solutions to Challenges in Smart Contracts and Blockchain Technology

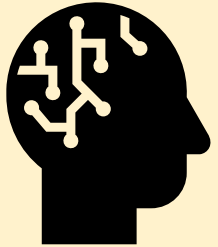
Legal and Educational Solutions

- Legal Standing of Smart Contracts
 - Legislation or regulation should define the legal standing.
- Education on Technology
 - Alleviate concerns through education.
- Digital Literacy
 - Role of government and educational institutions.



Technical and Regulatory Solutions

- Data Privacy
 - Implement robust data privacy measures.
- Scalability
 - Improve efficiency of blockchain networks.
- Continuous R&D
 - Exploration of efficient consensus algorithms.





Thank you!