

2021/CTI/DIA1/009 Session: 3

Artificial Intelligence Driven Online Dispute Resolution and Digital Security

Submitted by: eBridgeChina Research Institute



Public-Private Dialogue on Promoting Consumer Protection in the Dispute Resolution and Redress Mechanisms in E-Commerce 27-29 April 2021

AI Driven Online Dispute Resolution and Digital Security

Prof. Andy Lee, Sichuan University (anyu.lee@gmail.com) Fellow, NCTDR; Board Member, ICODR; President, eBridgeChina Research Institute

> 北京神洲商桥研究院 eBridgeChina Research Institute



We move Closer to AI,,,

Sofie is first ever Robot that was granted Saudi Arab citizenship and can chat with nature language with anyone at anytime for any topic.



What Sofie can do:

- Learning vast amount of information
- Review vast amount of question/answers;
- Build her own logical and rational mechanism;
- Empirical assessment;
- Case and Judgment Comparison
- World wide law and regulation checkup
- Rating of best settlements considering all costs;
- Prediction of best sceneior resolution





Dispute Resolution Evolution

- Dispute resolution online;
- Computer-aided resolution;
- Computer-aided mediation;
- Al Dispute risk alerting;
- Online credit system of resolution enforcement;
- Online Dispute Resolution





Contents

Dispute Resolution GOES ONLINE and Digital

AI-Enabled ODR

AI ODR Evolution

Digital Security and Trust Enabler

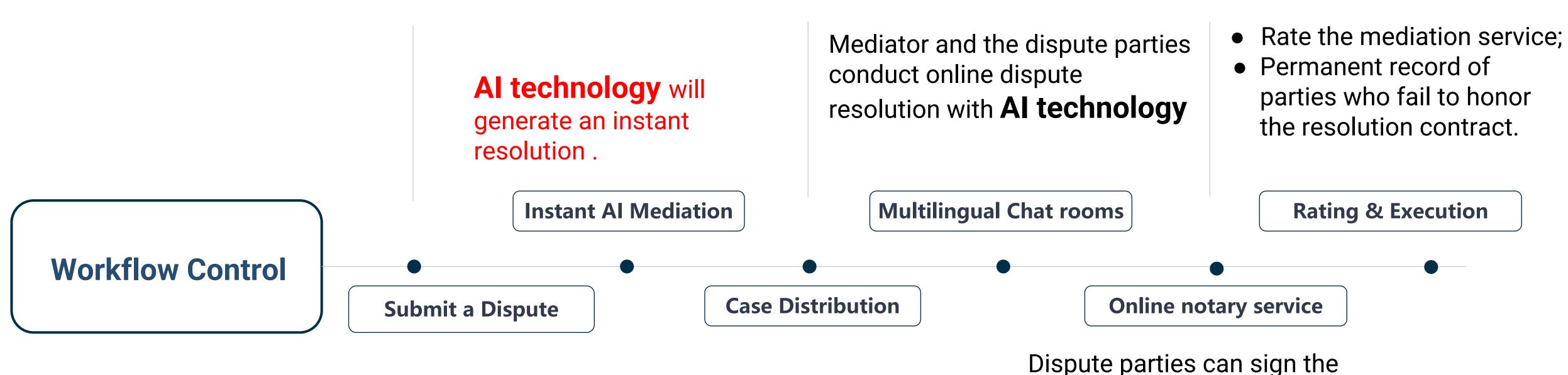
Dispute Resolution: ONLINE and Digital

Why and How?



- eCommerce makes disputes across economies.
- eCommerce creates massive micro-disputes
- Mediation time is more important than result
- Computers beat human in knowledge based approach..
- AI + ODR is the trend.

Dispute Resolution: ONLINE and Digital and Technologies



Through email, text message, and voices in case by case or batch mode using cloud services

END TO END DIGITAL

• Assign the dispute to relevant mediation partners according to the selection criteria with **Big data analysis**

Dispute parties can sign the resolution online with smart contract and **blockchain** technology.

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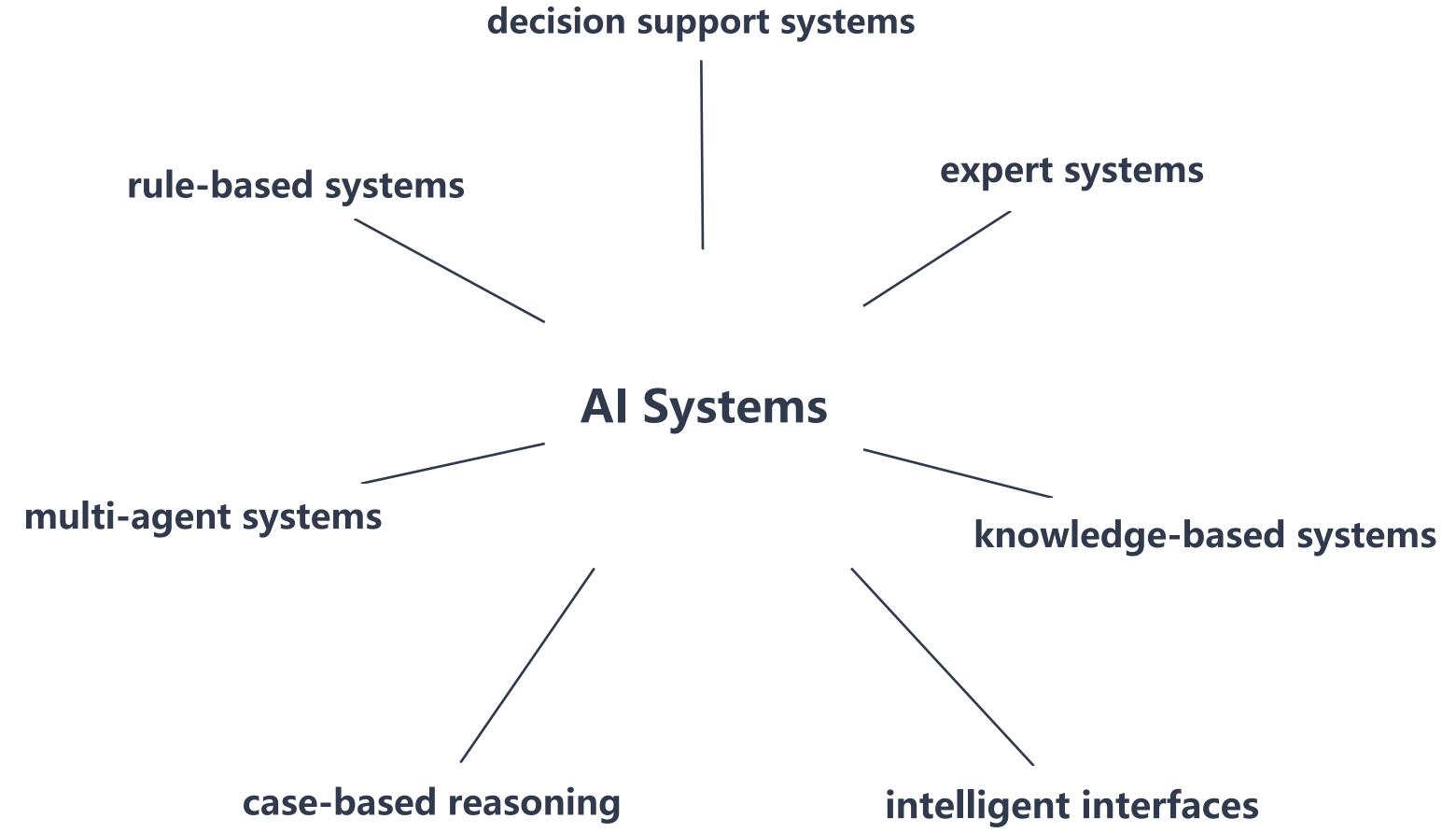
AI Driven ODR

- Whether the introduction of AI will replace a lawyer, arbitrator?
- How is mediation of AI participation different from human operations?
- Why introduce AI in dispute mediation, especially cross-border ecommerce online dispute resolution?

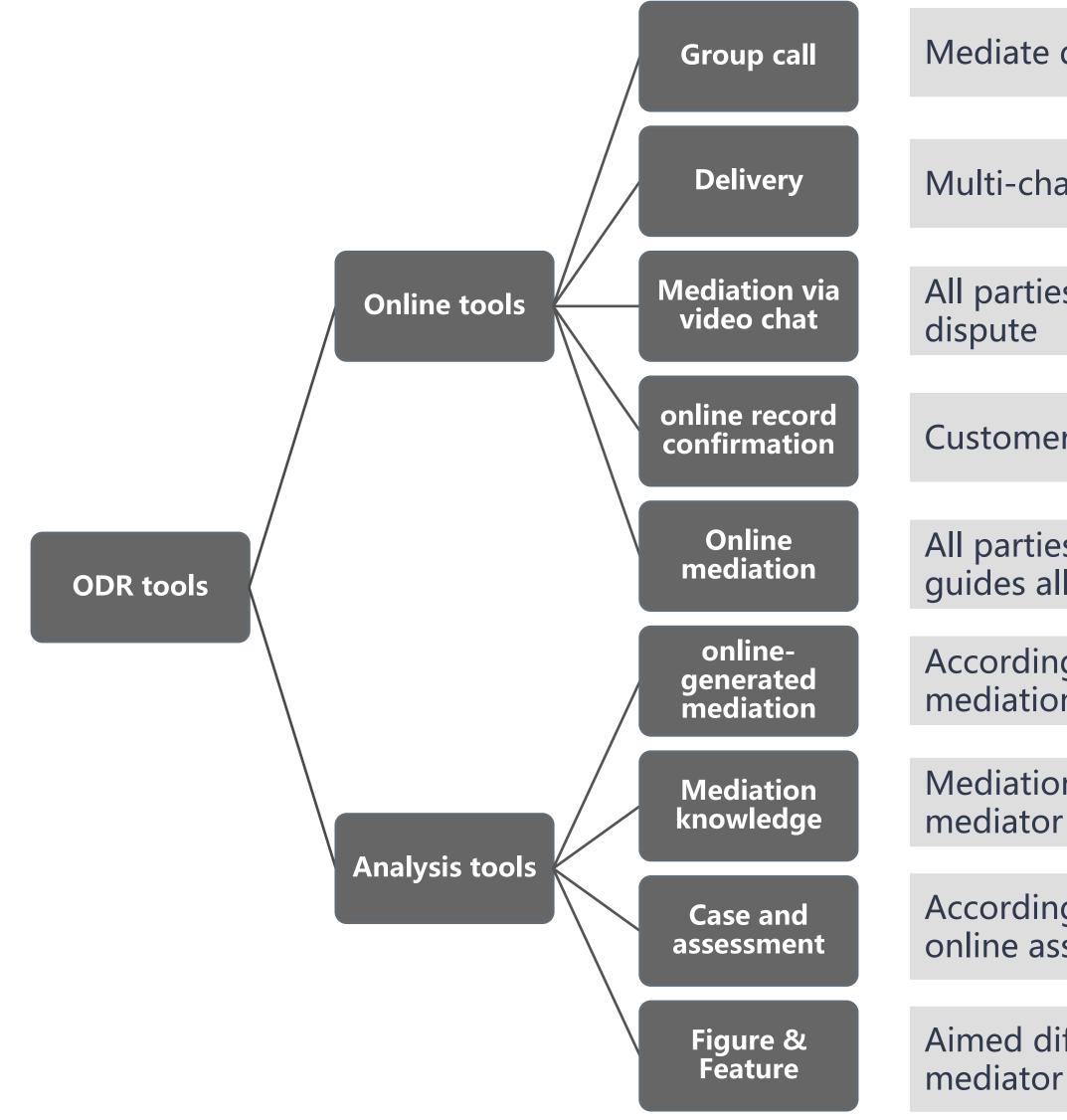
- Machine learning or deep learning will equip Al mediation with more knowledge, data and past resolutions, it can easy overtake the para-legal function.
- Neural network may provide better reasoning or negotiation strategy during the process, As of now, it is lack of passion and humanity.
- AI Driven ODR is necessary for consumer disputes in eCommerce, particularly in cross-border eCommerce.

l I Or





Relevant AI Systems



Mediation Tools: Diversified Tool-Set, Multi-Prong Attack

Mediate dispute via group call, meanwhile, all parties are online

Multi-channel electronic notifications

All parties appear via video chat, face to face, back to back, to mediate

Customer confirms record online; supports dual security identification

All parties express their viewpoints online、uploading evidence, mediator guides all parties on the same page

According to different kinds of contract templates, online-generated mediation protocol

Mediation knowledge、skills、judgements online、regulations, empower

According to dispute case content, recommends customer affiliated cases, online assessment, offers anticipates outcome to parties involved

Aimed different figures, information gathering, uniform analysis, assists mediator to formulate different solutions

ODR: Challenge to A

• Current Al

- Best solution;
- Controlling a rule based system
- Focus on next best move
- History data are important
- AI: Artificial Intelligence



- \circ No best solution
- Controlling human reaction
- Process is as important as the next resolution
- History data are important?
- AI : Artificial Intuition

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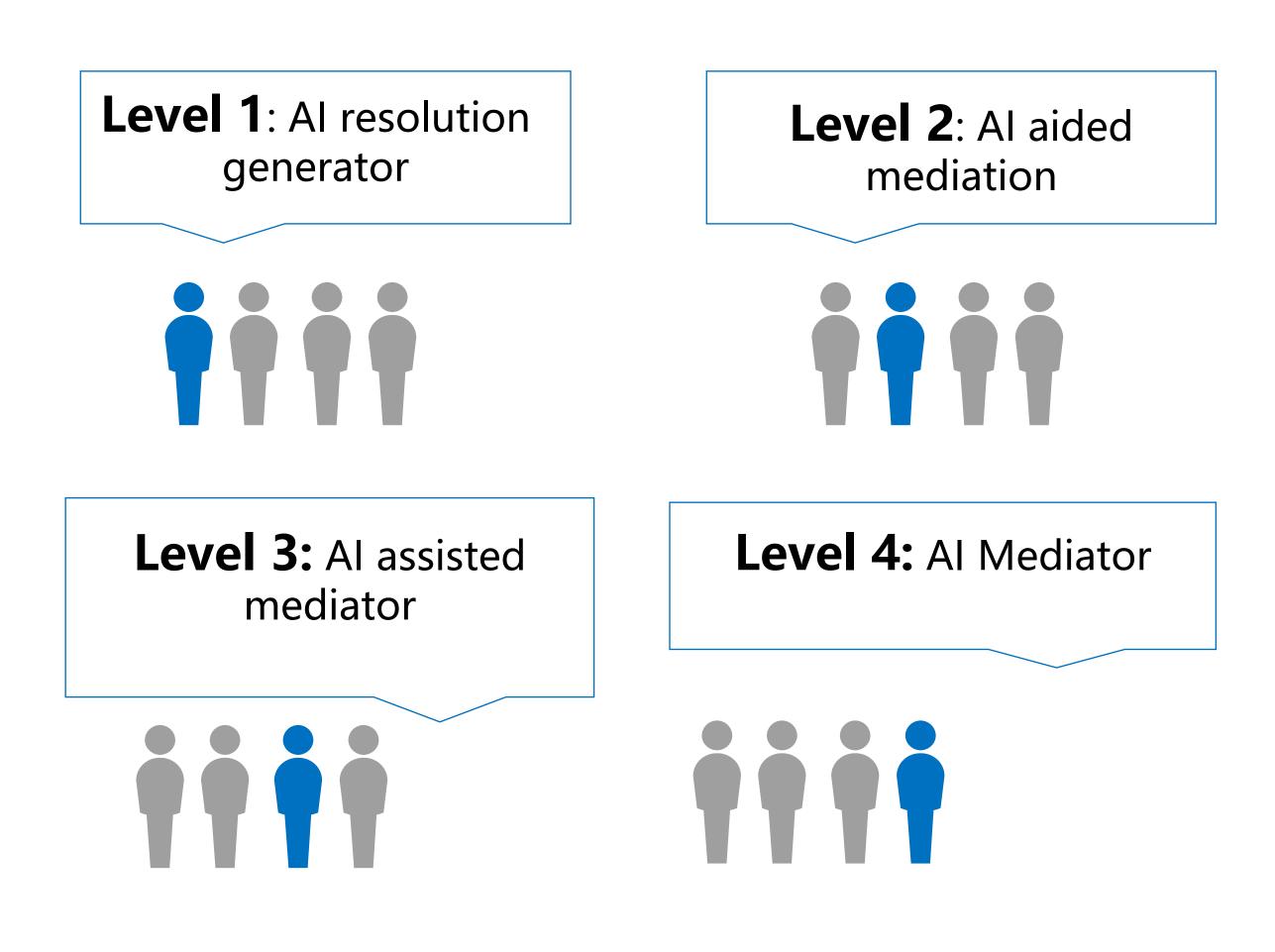
Definition of AI ODR

• Definition

• Adoption of AI technology in the ODR process

- AI ODR is not
 - Computer aided ODR
 - Intelligent ODR
 - ODR with adoption of BI and Big data analytical tools
 - \circ More $_{\circ}$

AI Mediation: Smart to Intelligent



Contents

Dispute Resolution **GOES ONLINE** and Digital

AI-Enabled ODR

Case **Distributions &** Information Services

Digital Security and trust enabler

Possible Risks of AI Mediation

- Privacy infringement
 - Sensitive data leak;
 - Unauthorized access to the database;
- Virus intrusion
 - Unauthorized internet intrusion;
 - Virus attack via internet connection;
 - Data interception via internet
- System risk
 - System availability;
 - Malfunction and unethical algorithm

Definition

Scope

Internet security: risk by the interconnection to the public network; System security: risk of malfunction or improper operation of digital system; Algorithm security: risk of algorithm ethic principle; Operator security: risk of operator qualification or honesty; generation units.

Other risks from the adoption of digital system.

- All security concerns because of the introduction of digital systems to the ODR process
- Trust security: risk of credible data communication to other digital systems or data

System Security and Trackability

- Time-Stamped security assurance: mediation process with time-stamped security, every case is unassailable
- Any misconduct will be recorded and traceable permanently
- All the documents should be immutable that makes records tamper proof
- Exceeding efficiency, simple and direct steps to get data registered

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评估内容			
纠纷名称:孔雷雷 投诉 深圳市萌驴国	国际旅行社有限公司 的纠纷		
投诉编号: 330100000001201803310564 诉求: 赔偿		申请人: 孔雷雷 金额:40人民币	被申请人: 深圳市萌驴国际旅行社有限公司
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评论: 双方当事人对调解满意度没有特殊感受			
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Data Security and Trustworthy

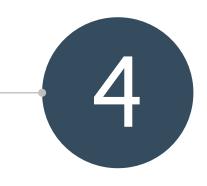
Irrefutable digital evidence permanently recorded with timestamp

Ultimate confidentiality with encrypted technology, restricted access





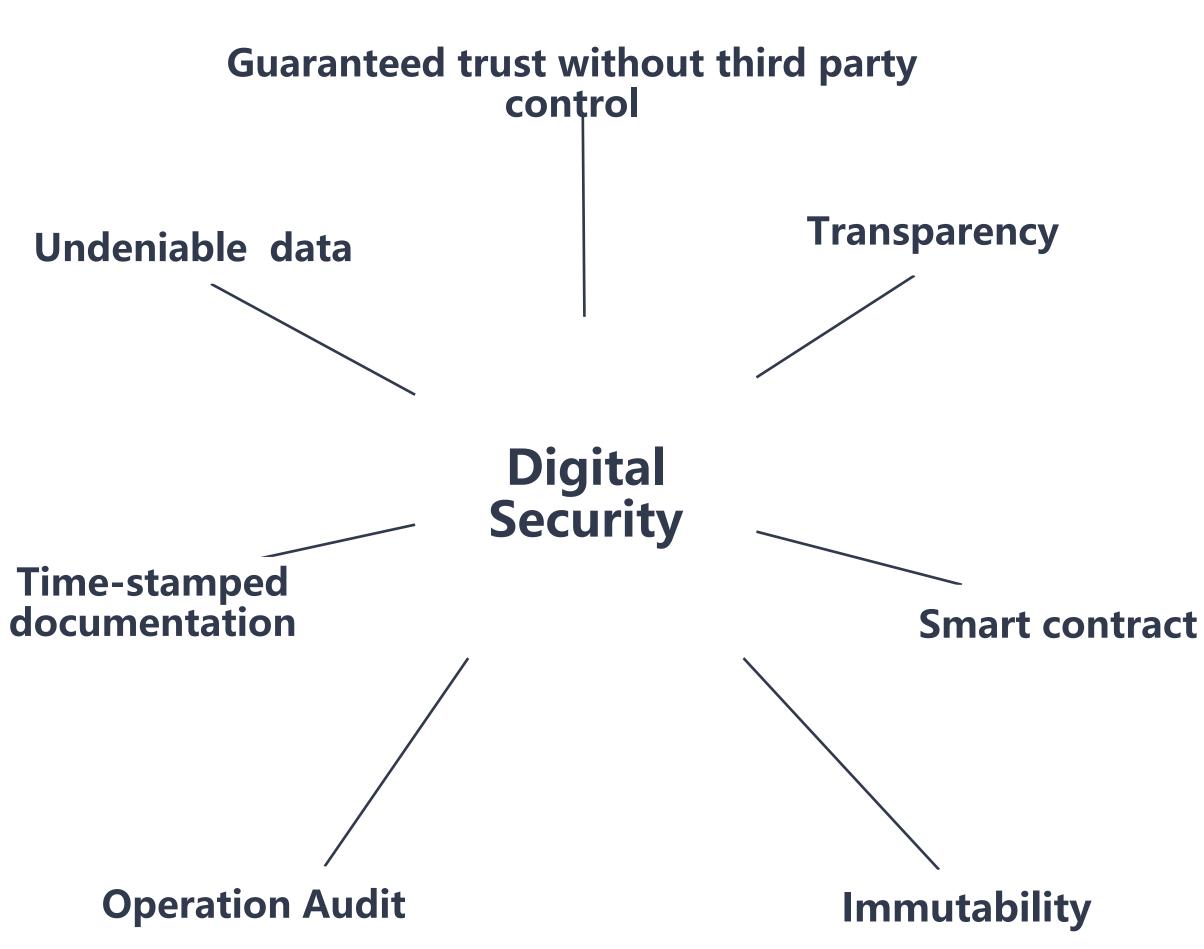
Forensic audibility allows users to trace action and data back to the source with transparency and accuracy



Data is secured by the most powerful and secure network



Management of Digital Security





Trend of AI+ODR

1. Current state of ODR is ADR online;

2. Future ODR is AI mediated online dispute resolution;

3. Mediators will train their own AI mediation units to stay in business. Algorithm is the winner; Sofie is the competitor.

4. Success of AI ODR is based on the management of digital Security.

Technology Infrastructure for AI-ODR. 1. Technology for the management of digital security. 2. Deep learning for training AI to evolve; 3. Big Data for analytic advisory; 4. Social Credit System for enforcement.

Please feel free to reach out with any questions!

