



# **THE PROOF OF TRUST**

Assuring all smart contracts globally

**The Proof of Trust & ICC: Thought Leadership Piece**

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## The Digitisation of Dispute Resolution in Global Commerce

### Background

Global trade has taken fundamental leaps forward over the past 5 years, owed to the growth of new digital mechanisms facilitating automated trade and giving rise to new consortiums. Previous competitors are now able to work collaboratively, reaching new consumers through more pragmatic means. Digitisation has equipped consumers and suppliers with a way to avoid the encumbrances of time-consuming, expensive carbon processes and are using innovative methods to increase efficiency for all participants.

One of the major advancements in technology and commerce which has enabled faster, more trusted automation, rigorous audit and sophisticated analytical output is blockchain and smart contract technology.

Blockchain technology at its core captures and executes transactions through a decentralised or distributed ledger system, effectively removing the ability to tamper with the chain of transactional events. This has been effective in the rise of popular decentralised digital assets such as Bitcoin and Ethereum and perhaps more powerful than digital assets, it has led us to the creation of enterprise blockchain applications.

Enterprise-grade blockchain platforms are being used across multiple sectors, including (but not limited to) healthcare<sup>1</sup>, construction<sup>2</sup>, supply chain<sup>3</sup>, insurance<sup>4</sup> and finance<sup>5</sup>. These networks are being applied across all major territories and have reshaped the landscape of trade and the ability to engage in meaningful faceless transactions, whilst maintaining trust and sufficient evidence of automation. Examples of such networks include:

We.trade is an application which has connected dozens of globally established banking partners with a growing base SMEs (Small-Medium Enterprises), digitising the end to end processes for trade finance.

Tradelens, the joint Maersk and IBM powerhouse supply chain initiative, has digitised the end to end journey in cargo movement. In addition, the shipping industry has embraced blockchain networks and IOT devices to improve traceability, improve efficiency and automation.

We have also seen technological advancements within the construction sector. The end to end procurement process for materials has been significantly improved through blockchain and digitising carbon lead initiatives. Insurance companies are also turning to distributed ledger technology due to the many available benefits. Specifically, research has highlighted the extent to which blockchain could reduce the processing time and cost of placement, claims settlement and key processes such as compliance checks.

Such solutions can provide a better view of identity and risk, given the amount of data flowing between client, broker, reinsurer and outsource service providers, the transformational potential within reinsurance enormous, and we could see an industry wide saving up to USD 10 billion <sup>6</sup>.



## Problem statement

Vast improvements in efficiency have been realised through digitisation and the movement of contractual agreements into digital arrangements. However, most of the solutions present today have lacked the full contemplation of the unhappy path. How do we handle contractual disputes when single or multiple participants have non-digital issues, which impact the ability to continue trade? In a typical issue or dispute, the transaction is paused, lawyers are stood up and if suitable resolutions are unable to be met, court proceedings are undertaken. This is a time-consuming process that can take up to 2 years for large international disputes, and normally results in both parties incurring financial losses<sup>7</sup>. The major immediate impacts of entering into a contractual dispute include; large liabilities on balance sheets and access to liquid capital being obstructed, as well as expensive litigation costs. For example, one large insurer set aside as much as £7.4 billion in 2019 as a reserving risk<sup>8</sup>, to cover the costs associated with future claims.

Many contractual arrangements include clauses for arbitration, independent bodies are able to assess the issues provided and provide suitable resolution. The encumbrances of an increase in the volume of disputes, (owed to greater opportunity for trade) and the impacts of COVID-19 has added a new depth of stress to arbitration centres globally. According to the annual ICC report on dispute statistics, there were 869 new cases during 2019, and 586 awards given out while a further 1,694 cases were still pending<sup>7</sup>. As the number of new cases in the last few years consistently outweighs the number of case awards, then it is clear that the number of pending cases will continue to grow. Before the pandemic the global average time to enforce a commercial contract was 650 days, but now could be extended by as much as 6 months<sup>9</sup>.

Now, more than ever, the requirement for thoughtful and robust enterprise grade dispute resolution application is deserved.

## Digitising Dispute resolution

The process of digitising the dispute resolution and arbitration process has taken many forms, most prominently it is used for B2C transactions and is seamlessly integrated into e-commerce platforms. However, there are very few online dispute resolutions services that have taken a commercialised approach, agnostic of the industry sector.

Examples of technology being used today are detailed below:

### ODR SERVICE 1

ODR SERVICE 1, are a secure eNegotiation system using patented optimisation algorithms to achieve fair and efficient solutions in dispute cases. ODR1 puts 'decision-makers in control, accelerates the process, and produces more satisfactory results'.

Rather than a dispute resolution service, ODR1 offers an online, mediator-supported negotiation table that essentially allows for a 'blind' bidding negotiation in order to settle. For medium-to-large transaction levels, this service is inefficient and could potentially lead to unfair and untimely resolution due to lack of legal input. Negotiation and mediation may not always be acceptable or even applicable, depending on the nature of the disagreement.

### ODR SERVICE 2

ODR 2 offers an Online Dispute Resolution platform that supports all phases of the ODR lifecycle including Negotiation, Mediation & Adjudication. The ODR platform allows businesses or organisations to use the ODR service on their own network and to adjudicate and mediate their own cases through the platform.

This platform does not supply the tools and expertise of a Delegate service and would be considered more of a ODR facilitation service which is ran on the customer's network. The platform allows users to then mediate their own cases, which does not relate to a true, independent, dispute resolution service.

As this service operates only in the realm of legacy technology, this service is unable to utilise the myriad benefits that blockchain offers.



### ODR SERVICE 3

ODR 3'S patented web-based negotiation technology facilitates settling monetary disputes. ODR 3 uses automation to hasten the settlement process which can be time consuming and inefficient.

This process relies on each party's submissions and agreements., resulting in a back-and-forth process between the parties until an agreement is reached. Once again, this relies upon individuals being able to successfully negotiate themselves and would be inappropriate in a wide range of cases.

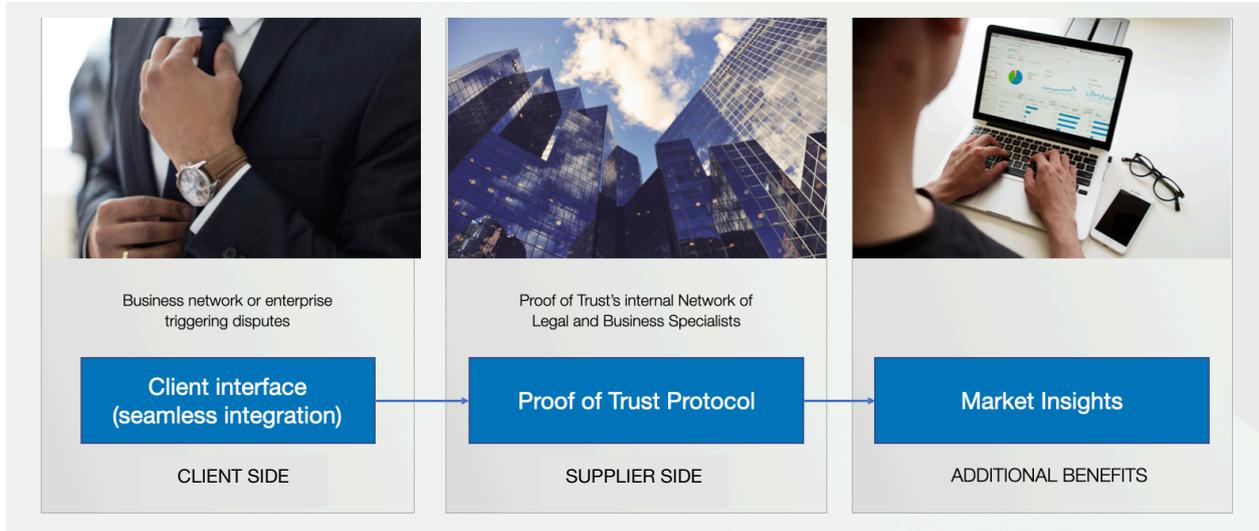
The digitisation of commercial arbitration should not seek to provide a simple replica of carbon processes alone, it should understand the mechanisms which are refined in traditional dispute resolution, produce positive outcomes from efficiency and seek to innovate beyond current experience.

	ODR3	ODR2	ODR1	PROOF OF TRUST COSMOS
Facilitates Dispute Resolution	✓	✓	✓	✓
Fully digitised solution	✓	✓	✓	✓
Digitised Document Management		✓	✓	✓
Data Analytics			✓	✓
Automation of dispute Initiation processes				✓
Reduced risk of incorrect data input through Data Verification				✓
Blockchain enabled				✓
Network of Legal and Business Experts for adjudication				✓
Fair distribution of cases to available staff through anti-collusion algorithm				✓
Distributed data storage				✓
Smart Contract Integration				✓



**The Proof of Trust**

The Proof of Trust has developed its globally patented, enterprise grade blockchain application COSMOS in order to address the gap. It is capable of dealing with commercial disputes at scale, agnostic of industry, dispute category, jurisdiction and has been built for industrial scale by their development partners IBM.

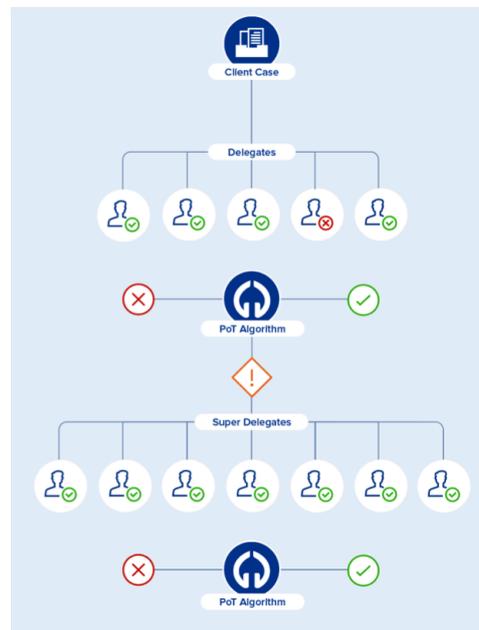


**4 Clicks to Adjudication**

The Proof of Trust has taken the notion 'faster is better' very seriously. Not only does COSMOS allow business to resume and enable continuity more quickly after issues arise, there are also many rich features in which technology has been incorporated, taking innovation way beyond today's carbon solutions.

By empowering an anonymized panel of adjudicators (Delegates), The Proof of Trust technology selects suitable, accountable experts from its network to address issues and disputes between participants in a formal arrangement. Sophisticated algorithms are employed to select Delegates that are unable to communicate and compromise proceedings, while simultaneously shielding them from influence by either participant involved in the dispute.

Delegates are gathered from different industries with many different branches of expertise in a borderless fashion. By creating a diverse pool of Delegates, we provide clients access to a growing network of legal and business specialists, gaining valuable insight across sectors and significantly reducing the otherwise costly procurement of arbiter services.



The quality of Delegates is controlled through identity and profile management and is coupled with security and screening processes that maintain quality and assurance. The ability to scale and grow supplier base efficiently is one of the key gains of digitising manual processes.

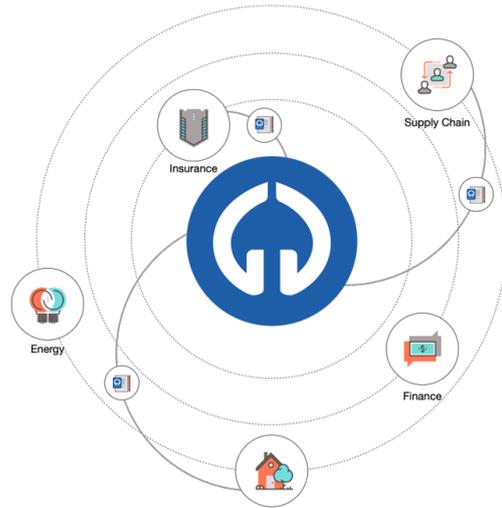
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COSMOS is also able to skillset match efficiently, ensuring a panel of assigned arbiters can be applied faster, and with greater accuracy against the issue categories presented at the initiation of this services. Ultimately saving vast amounts of time which would otherwise be spent waiting for a court date.

Blockchain also permits enhanced audit and compliance features within The Proof of Trust's application. Each non-sensitive data point within the application is recorded to a transactional ledger, effectively creating an immutable record of each event within the lifetime of a dispute.

One of the key benefits from this application is the continuous feedback loop of information and analytics. Providing the subscriber base with key data surrounding their issues, enabling the ability to improve contractual clauses by highlighting potential weaknesses incurred by disputes. Through aggregate information of the dispute lifecycle, as well as inter and intra industry anonymized dispute information we can continuously improve performance measures.



As we enter uncharted territory as a result of COVID-19, the requirement for pragmatic digital solutions that drive business continuity are requires more now than ever. Streamline otherwise cumbersome and timely manual processes, are a key necessity to the lifecycle of business transactions, ensuring adequate protection for all in a trusted and independent manner. We firmly believe that move towards digital arbitration and dispute resolution, is a vital component to ensure continued intelligent and pragmatic commerce.

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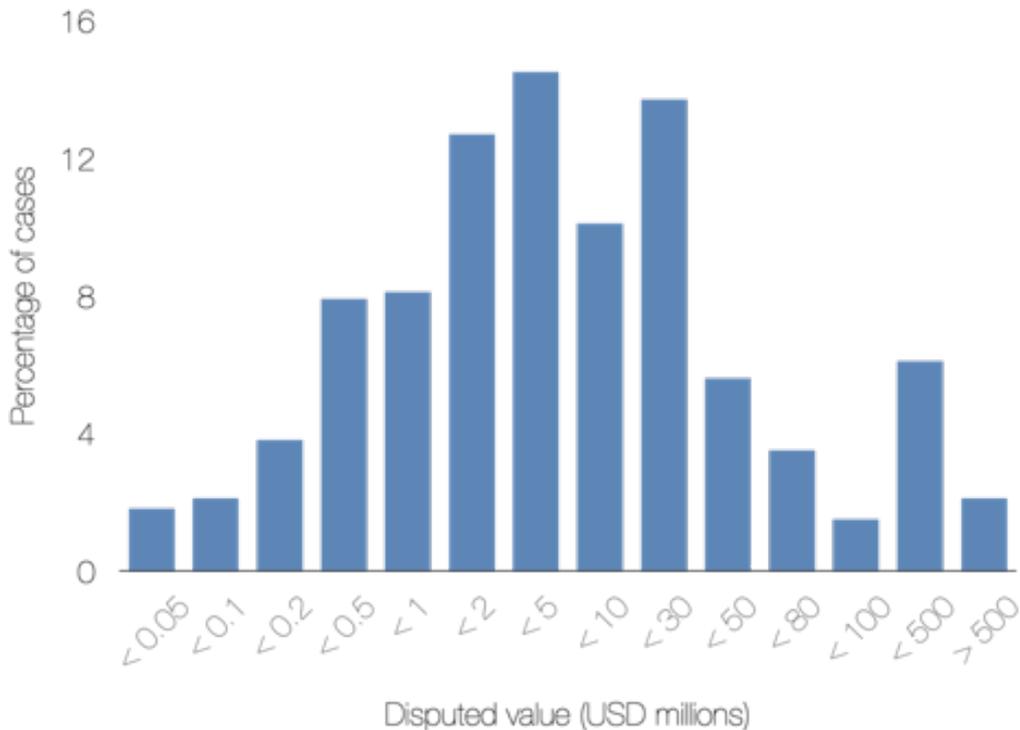
## Research and Statistics for International Arbitration

### ICC Dispute Resolution

- In 2019, as with previous years, The International Court of Arbitration registered an increasing number of disputes, with 869 new cases arising (810 in 2017, 842 in 2018).
- Expedited Procedure Provisions were introduced in 2017 for cases valued under USD 2 million to allow proceedings to dealt with quicker and at lower cost.
- Around 30% of all cases are being handled in this fashion. Usually, a sole arbitrator is selected, simplifying the process and expediting the award.

### Value of Disputed Cases

- 1) Over 50% of the cases filed with ICC in 2019 and 50% of the pending cases at the end of 2019 had an amount in dispute between US\$ 1 million and US\$ 30 million.
- 2) The mean average disputed in cases filed during 2019 was US\$ 52 million, while the median being close to US\$ 4 million (the difference can be explained by a few exceptionally high value cases, e.g. a \$10 bn dollar case, raising the average enormously).
- 3) The aggregate value of all pending disputes before the ICC Court at the end of 2019 was US\$ 230 billion, with an average value of US\$ 140 million and a median value of US\$ 10 million. Suggesting that the cases that remain to be completed are of significantly higher value than those completed in 2019.



## Outcomes

- **During 2019:**

- A total of 869 new cases were registered.
- 586 awards were given to cases, (145 partial awards, 397 final awards and 44 awards by consent).
- A total of 1,694 pending cases remain to be completed (end of 2019).
- In the ICC's cases that have reached a final award in 2019, the average duration of the proceedings was 26 months, with a median of 22 months. The ICC operates on a time-limiting basis for their arbitration services, such that sole arbitrators produce their draft awards within 2 months.
- In 2019, 162 draft final awards were beyond the imposed timeframe and a fee reduction was applied in 68 of such cases.
- As the number of new cases in the last few years consistently outweighs the number of case awards, then it is clear that the number of pending cases will continue to grow.
- With the added challenges of COVID and the difficulty in securing court cases anywhere in the world, technology and digital arbitration could form a crucial part of resolving the growing case load.

### Disputes by Industry

- The largest proportion, 24% (211), of registered cases arose from the construction/engineering sector. This industry often has disputes arising over multiple issues, such as time extensions (50%), defective work (42%) or withholding of money (28%) among many other rationales. (WTO)
- The second largest, with 140 new cases being registered (16%), was the Energy sector. This had previously come as a consequence of the divestment in Fossil fuels. This year, we have seen negative oil prices, difficulties in storage and transportation as well as escalated climatic contestations, the volume of disputes can only be expected to grow rapidly.

A third industry, Healthcare and Pharmaceuticals will become especially important dispute resolution hub this year. In previous years, labour (48%), malpractice (33%) and product liability (29%), had dominated the industry in terms of number of disputes.

As we move past the pre-COVID world, we should see a large increase in the number of disputes arising around all these areas, especially with contractual disagreements between pharmaceutical companies and regulators.

