

Digital disputes: anticipating and resolving disputes in the digital sphere

The move to digital is accelerating. The digital transformation that companies underwent in 2020 continued in 2021 at a rapid pace with businesses across the globe continuing to be affected by the pandemic. There is no denying that digital is front and centre for the success of many businesses today. That trend is only likely to increase in the coming decade and beyond.

With industries doubling down on digital investment, major innovations and massive changes are afoot. The pandemic has fuelled a boom in the adoption of cloud services, the increase in SaaS offerings (software as a service) and essentially any technology that enabled commerce, communication, and productivity in a remote environment.

The step change in digitalisation in the last 24 months has also seen significantly more investment pour in to supporting longer term development of digital technologies and infrastructure that stand to change the way we all live and work more substantively. Subject to supply chains holding up in 2022, this trend is likely to continue this year and beyond.

In the context of B2B or B2C disputes, complex issues arise in the context of digital transactions both for the substance of the parties' legal rights and obligations but also in relation to the practical question of how to evidence and enforce them.

Who is liable for the decisions of an algorithm?	How to program morality and societal norms into a self-driving car? Who is responsible for the consequences of that programming: manufacturer, software developer, owner?
Are transactions in a decentralised ecosystem outside the reach of the law/courts/tribunals?	How to reconcile offline rights and obligations with self-executing online transactions?
How can a party obtain the evidence it needs to prove its case about automated trading triggered by a third-party Internet of Things (IoT) device?	Can blockchain help to facilitate amicable settlements and bring costs down in resolving disputes?
What recourse is available if a non fungible token (NFT) is mis-sold, stolen or lost?	Does arbitration advance or dilute the benefits afforded to B2B users of novel digital technologies?



Trends and predictions for 2022 and beyond

A bucket load of data to make sense of

Every day in 2020 we created over a 2.5 quintillion bytes of data per day (there are 18 zeros in a quintillion).¹ That number is growing at incredible speed and the data is increasingly being generated by machines rather than individuals. In the context of disputes, that data can be very helpful evidence. It can also mean a haystack within which to find relevant information.

Data is only as good as the systems we use to manage, regulate, and mine it for insights. Year on year, algorithms (under the umbrella of artificial intelligence) are becoming increasingly sophisticated. The best-known example may be Google's search engine and its ability to predict searches and offer up relevant results (there were expected to be around 2 trillion google searches in 2021 alone). But the impact of AI is so much broader, with algorithms feeding decision making within businesses across all sectors as demand for better data and improved digital experiences increases. The same applies in the context of dispute resolution, with supervised and unsupervised learning supporting document harvesting and review processes, among other things.

The work that many organisations continued in 2021 with new use cases for AI will continue to expand as organisations realise the power that AI can hold for solving problems better, faster, and at scale. With this in mind, AI stands to become more ubiquitous in the everyday lives of workers and consumers and it will also continue to be more useful. As AI moves from applied analytics and natural language processing to more robust and human-like functionality it opens up more

radical ways in which machines may interact with humans in years to come.

Today, AI can generate super realistic images and 3D models of human faces, generate text for conversation, convert that text to human-sounding speech, and animate 3D characters to make it look like they are speaking. Eventually, AI may be able to generate complete virtual worlds in real time as we explore them and create fully immersive 3D environments that we can explore and interact with.

Broadening global access to the internet

Access to the internet stood at around 2.6 billion users in 2013 and increased dramatically to 4.66 billion users in January 2021, close to 60% of the world population.² We are also seeing the roll out of 5G which will continue to gather pace, greatly increasing network efficiency and capacity, while delivering faster speeds and lower latency. In turn, this opens up new ways in which people can interact online, as well as facilitating innovation in smart cars and infrastructure development in smart cities.

Are we all off to live in the Metaverse?

2021 was the year in which the Metaverse entered the mainstream lexicon and Facebook became Meta. This term means different things depending on who you ask, but the main ingredients are ubiquitous connectivity, crypto assets (cryptocurrencies, NFTs, smart contracts and crypto networks like Bitcoin and Ethereum) and eXtended Reality (XR) including VR and AR.

While we are unlikely to all be living our lives entirely in a matrix-style parallel

universe just yet, there are obvious and wide-ranging applications arising from the ability to commoditise and trade information through NFTs in a digital environment. As well as creating entirely new markets segments (eg see Nike's acquisition of RTFKT in the 'virtual wearables' space or the Dogatars™ available from The Dematerialised) these technologies will enable process improvement within existing business processes.

One such use case widely discussed throughout 2021 was tokenisation and, particularly, CBDCs (Central Bank Digital Currencies) which central banks and regulators are considering as a means to anchor crypto transactions back to established and government-backed marketplaces. There are arguments for and against doing so, but these are major innovations for finance which could bridge a gap in existing financial markets (eg fractionalisation of ownership or hard/real assets, movement of wealth across marketplaces, access to currency for the 'unbanked'). These are innovations which extend into all segments of society and business.

Cryptoassets, coupled with IoT, AI and other new technologies can be used to enable new types of transactions (digital operations) to be automated and effected in a relatively frictionless environment, which can be pegged back to cryptocurrencies/stablecoins and eventually fiat currency. In short, businesses will ignore the opportunities afforded by new digital technologies at their peril.

How do these trends and predictions affect B2B or B2C dispute resolution in the digital sphere?

A key consideration for the adoption of these new technologies is to understand how the transactions within a particular online ecosystem will interface with the offline world. A fundamental aspect of that is to understand what legal rights and obligations will exist as a result of parties' online actions/transactions, what laws will apply and how those rights and obligations

will be recognised and enforced if disagreements arise.

Parties also need to be clear about the drivers for adopting these technologies in order to assess whether existing dispute resolution mechanisms align with or undermine those objectives and whether digital 'alternatives' to these existing dispute resolution processes are required.

There is a growing number of online dispute resolution offerings that have the stated aim of digitising the traditional dispute

resolution process. Some of these are centralised platforms which seek to digitise existing processes. Others are intended to be more disruptive and to deliver 'decentralised justice' within the online ecosystem outside the reach of conventional dispute resolution forums (ie traditionally domestic courts).

Many of the proponents of these decentralised dispute resolution tools argue that validity in the eyes of the law is not what matters in the online world, as long as the parties' codified agreement enables

1. Source: Raconteur.

2. Source: Statista.

enforcement as a matter of practice within the digital ecosystem. While this argument may perhaps hold in some instances (small value, high volume disputes and C2C transactions), it is unlikely to be true for more complex and high value B2C or B2B relationships. In these relationships, digital transactions will need to interface and correlate to the offline world and comply with applicable regulatory regimes. This will also require a valid means of real world 'enforcement' of those digital obligations.

If a relationship exists within a digital ecosystem or relies upon decisions made by a machine, why do the parties' rights need to be enforceable 'offline'?

The short answer to this question is that it is neither desirable nor possible in practice for digital transactions in the B2B context to escape altogether the grasp of the mandatory laws that apply 'offline'. Parties can of course agree as a matter of contract what they will do within the digital ecosystem and how that agreement will be executed within the platform. But we all know that contracts do not provide for every eventuality, that protections are sometimes required outside the four corners of a contract (eg in instances of fraud) and that parties don't always comply with their contracts.

The practical inability (and undesirability) of escaping mandatory laws

Take smart contracts as an example (a term generally used in the context of blockchain ecosystems). This term refers to code that is intended to be executed automatically upon certain pre-determined trigger events that can be monitored digitally. This means that, the intended steps are programmed to run according to strict (and pre-defined) inputs. Digital assets can be transferred (be that cryptocurrency or data) between counterparties directly (without the need for further action between them). Smart contracts can be used to define and perform the obligations of a legally binding contract. The term "smart legal contract" is often used when the smart contract forms part of the binding contract itself.

Opportunities afforded by smart contracts are huge and of wide application. Examples, among many others, include supply chain management, identity authentication, HSE/ operations management and transparency, regulatory/ESG monitoring and reporting.

However, it would be foolhardy to expect that the parties will have anticipated every eventuality upon the coding of their agreement or indeed that every term of their agreement is capable of codification.

Similarly, parties cannot proceed on the assumption that no error will ever need rectifying in these smart contracts (bugs are a feature of all coding) or that parties will always agree that the outcome of the smart contract reflected their agreement. When those issues arise, parties to the smart contract need to have some recourse to ensure their bargain is upheld. This cannot be achieved without recourse to the law. In order for smart contracts to give parties the necessary certainty to carry on business, they must be as legally robust as they are technologically sound.

If parties seek to treat their relationship as being shielded from the reach of the law, they run significant risks that, at any point, a party who is dissatisfied with an outcome may seek to obtain redress before traditional judicial authorities. In that instance, if the parties have failed to anticipate that possibility and, for example, failed to specify the applicable law of their agreement and the courts with supervisory authority over the dispute resolution process, very complex legal issues (eg conflicts of law) are likely to arise which could result in tactical satellite litigation around the world.



Where does arbitration come in?

Despite all the headlines, blockchain, NFTs and the metaverse remain on the fringes of business and society. In order for these technologies and the opportunities they present for B2B relationships to go mainstream, adoption needs to be 'legally robust by design'. This includes identifying mechanisms for resolving disputes that will enhance the digital offering, while being enforceable offline.



Arbitration can play that role in the short term, although greater digitalization of the arbitration process and the legislative frameworks within which arbitrations take place will continue to bolster the utility of arbitration in this context. Arbitration already benefits from several features that make it attractive as a dispute resolution process for digital transactions. Specifically:

- **Global ease of enforcement:** arbitration agreements are widely enforced under national laws and as a matter of treaty obligation pursuant to the New York Convention. When operating in a cross-border, a-national digital environment, this is a very valuable advantage of arbitration over court litigation or any form of consensual online mechanism which would require enforcement before a court/tribunal. That said, this still requires a counterparty to have an offline presence and assets that would be within the reach of a court within one of the NYC jurisdictions (c. 170 countries globally). In the same way that crypto will likely be pegged in due course to offline assets through stable coins or CBDCs, Decentralised Autonomous Organisations (DAOs) will likely require some offline nexus (see for instance Wyoming's codification of rules applicable to DAOs domiciled in that state).

- **Flexibility of process:** arbitration is a creature of contract. Parties can – within the framework of applicable mandatory laws – agree whatever process they deem appropriate for the resolution of their disputes through arbitration. For example, if parties wish to prioritise speed of outcome, they can agree abridged timeframes. Similarly they could agree upfront (depending on the relevant digital platform architecture) that certain evidence in relation to pre-defined types of dispute may be generated from the system and shared with the Tribunal for prompt determination 'on the papers' (ie without a hearing).

- **Expertise of decision makers:** arbitration offers parties the ability to select arbitrators with appropriate expertise (for example, arbitrators with an understanding of coding for a dispute about the working of a smart contract). This feature is sometimes downplayed, given that courts can rely on third party experts. However, an understanding of the technologies at hand and how they operate can be fundamental in this context in establishing a fair but robust procedure for the resolution of the dispute.



However, there are also challenges for arbitration to overcome in this sphere, including:

- **Third party orders and compelling a recalcitrant party:** Because arbitration is a creature of contract, the jurisdiction of a tribunal is defined by the parties' arbitration agreement. A tribunal cannot, without support from supervisory courts, make orders against third parties or require the production of evidence that is not controlled by the parties to the arbitration agreement. Similarly, the tribunal itself has limited recourse to compel a recalcitrant party to do something. However, tribunals are able to make awards against parties to an arbitration agreement who later refuse to participate in the process and that award can be enforced around the world wherever that party holds assets.

- **Speed:** current arbitration rules do not generally result in an award inside 9 months from the start of the dispute (and often much longer for complex disputes). In the context of digital transactions in a fast-moving environment, that could be seen as too slow. However, as mentioned above, it is open for parties to agree an abridged process. In addition, most recent institutional rules now provide for emergency arbitration and expedited appointment of tribunals by default, which greatly assists parties quickly to obtain an order to maintain the status quo.

- **Cost:** there is no doubt that in this context, especially while the value of transactions in the digital sphere remains comparatively low versus the offline B2B market, arbitration needs to get cheaper. However, this is readily achievable through tailored pricing and procedures for digital disputes, and the selection of counsel and arbitrators who understand the technologies at hand and can navigate the related issues effectively and efficiently.

What's next?

Parties adopting new processes in the digital sphere should be encouraged to include express terms in their contracts/smart contracts/smart legal contracts aimed at addressing the resolution of their disputes, the laws that will apply to their contractual relationships and the interface between their relationship in the digital and offline worlds. As the use of these technologies become more mainstream, the market will develop more tailored practices and model clauses that parties can make use of when negotiating and drafting their agreements.

Helpful guidance already exists in many jurisdictions, and some examples from England and Wales are set out below.

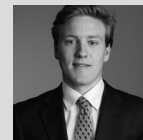
- [Legal statement](#)
- [Law Commission: Smart legal contracts Advice to Government](#)
- [Blockchain: Legal and Regulatory Guidance](#)
- [Bank of England Discussion Paper on CBDCs](#)
- [HMRC Crypto promotions](#)
- [UKJT Dispute Rules](#)

These topics were discussed at a webinar on 8 February, co-hosted with GAR and Lexology. Charlie Morgan, Prof. Sarah Green (Law Commission), Sapfo Constantatos (SCB) and Sam Goodman (Twenty Essex) discussed: (i) why parties' rights and obligations need to be enforceable 'offline' even if the relationship is digital; (ii) whether arbitration is fit for purpose in determining digital disputes; (iii) what regulatory changes are needed to give certainty as to parties' rights and obligations in the digital realm; (iii) the drivers for 'end users' of arbitration in adopting these technologies and what changes this may require to existing DR processes. You can access the recording of the webinar [here](#).

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Hear **Charlie Morgan** talk about anticipating and resolving disputes in the digital sphere [here](#)