

The automatic nature of smart contracts makes them a particularly interesting tool to use in international trade to automate transactions. However, the use of smart contracts does raise certain legal issues that are important to bear in mind, in particular issues of enforcement and liability that may need to be addressed if the contract has been miscoded (see Section 4.2.(c)). In addition, smart contracts are computer programmes, and, like any programming code, they may contain unintended mistakes (Delmolino *et al.*, 2015). The 2016 DAO attack mentioned earlier was the result of vulnerability within the smart contract programme code used in that case. Smart contracts are, along with the user interface (i.e. the mobile phone, tablet or computer used to access the internet), the layer where most security flaws occur in the blockchain ecosystem.

5. Multiple applications... but not a solution to everything

While, for many, Blockchain, as FT Technology Reporter Sally Davies has said, “is to Bitcoin, what the Internet is to email”, the technology is more than simply the infrastructure supporting Bitcoin. The last few years have shown that Blockchain as a technology may be applicable to a large variety of industries and sectors, each with their own specificities. The technology can be deployed with customized features. Properties from security requirements to consensus protocols can be tailored to the specific needs and business requirements of a particular project. Customized blockchain development services have mushroomed in recent years, offering customers a wide array of options, including pre-built shells or totally bespoke systems, and open-source platforms (such as Ethereum and Hyperledger Fabric) offer the possibility to developers to build tailored blockchains choosing from a menu of functionalities and protocols.

While it presents interesting features, Blockchain cannot, however, solve everything, as the current hype surrounding it tends to lead us to believe. Companies and institutions interested in the technology need to ponder the costs and benefits of using it, and make sure that the technology is best suited to their needs. Building a blockchain platform is a task that requires careful consideration by and coordination among potential participants, in order to analyse the opportunities and limitations of Blockchain in comparison to other, less ambitious, alternatives, and agree on key parameters (e.g. the nature of the blockchain, the validating rules, etc.), not to mention the technological knowledge that the users of the system would need. A plethora of decision-tree models have been published on the web to enable businesses and institutions to make an informed decision on whether a blockchain is an appropriate solution to their needs and if so, what type of blockchain is most relevant to their situation.¹⁸