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Decoding the legalese around blockchain in India

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As the Indian government firms up its stance on the blockchain technology, lawyers Vaibhav Parikh and Jaideep Reddy scrutinise the fine print on emerging legal issues that this opportunity-laden technology presents.

As we await a high-level government committee's report on the regulation of cryptocurrencies (also known as "virtual currencies"), interest in blockchaintechnology has not slowed at all. In fact, the Securities and Exchange Board of India (SEBI) and the state governments of Andhra Pradesh, Karnataka, and Telangana have all recently announced proposals and partnerships to explore the use of the technology. This is in addition to industry initiatives, with several leading banks including ICICI Bank and State Bank of India forming a consortium and actively taking steps to implement the technology.

We should note that while blockchain technology is the basis of cryptocurrencies like bitcoin, there are largely two industry verticals developing in parallel. The first is the cryptocurrency industry, where users can buy and sell bitcoin, ethereum, and other cryptocurrencies using platforms like Unocoin and Zebpay. Businesses can accept cryptocurrencies as well. The distinctive value proposition in this industry is that of the efficiency advantages of cryptocurrencies over money e.g., ease of transfer, storage of value, and micro-transactions.

The second vertical is the use of blockchain technology as a backend technology by banks, financial institutions, and governments for existing operations (e.g., clearing and settlement of money, and the maintenance of land records). This relies on the efficiencies created by blockchain technology itself i.e., transparency, immutability, and decentralisation.

For all practical purposes, the blockchain technology is best understood as a distributed ledger. Whereas market participants traditionally separately maintain and update their own ledgers, the blockchain works as a ledger of which every participant has a copy and every transaction is recorded. Every copy of the distributed ledger is simultaneously and automatically updated. This is why when someone starts using the bitcoin blockchain, they download a copy of the bitcoin ledger containing every bitcoin transaction since its beginning. To protect the privacy of transactions, some companies have devised ways in which only the relevant participants can see transactions.
The following are some emerging issues that we are seeing in this space.

Initial Coin Offerings (ICOs)
Ever thought you could raise US $35 million in under 30 seconds? US $153 million in 3 hours? ICOs make it possible: Brave, a privacy-oriented web browser, and Bancor, a price discovery protocol, respectively, did exactly this recently.
An ICO allows any startup with an idea or more to make a pitch online, and seek investment from interested investors. How? The startup issues cryptocurrency tokens, branded after itself, to investors who pay for them with (usually) bitcoin and ethereum. Usually, anyone can invest. For example, investors in the Bancor ICO, received 'Bancor' tokens.

What does it mean to hold such a token? While one may think that by putting value into a business, they are receiving equity, this is often not the case with ICOs. Rather, tokens have two aspects:

- Depending on the token, they provide holders with different rights: access to the software, profit-sharing, voting and governance rights, and/or participation in the software product
- They are freely tradeable, and when the business does well, the price of the token will appreciate

Legal systems around the world are struggling to find ways to regulate ICOs. The U.S. Securities and Exchange Commission (SEC) recently held that one of the more well-known ICOs (the Ethereum DAO ICO) was a securities offering subject to securities laws. It took a substance-over-form approach and held that, all said and done, investors had invested

money with a reasonable expectation of profits which were to be derived from the managerial efforts of others.In India, the question is whether such tokens are "securities" under the Securities Contracts (Regulation) Act, 1956.

This is an analysis loaded with grey areas, and will depend on the particular rights associated with the token. Mere access to use a software does not resemble a share, but rights in the underlying assets of the business do. The government also has the power to declare any instruments as "securities". If ICOs gain prominence in India, the authorities could declare certain kinds of ICO tokens as "securities". If this is done, such ICOs will be subject to Indian securities laws and be regulated by the Securities and Exchange Board of India (SEBI).

FINTECH

Over the past two years, nearly all the leading financial institutions globally have made some exploration of blockchain technology. The Enterprise Ethereum Alliance, Hyperledger, and R3 are three leading consortiums that boast the membership of ABN Amro, Barclays, Credit Susse, HSBC, ING, Intel, J.P. Morgan, Microsoft, Nomura, Santander, Wells Fargo, and many other household names.

India has a consortium of its own, called 'Bankchain', led by the State Bank of India, and including Axis Bank, ICICI Bank, Yes Bank, and 20 others. It is meant to be a "community of banks for exploring, building and implementing blockchain solutions."
Fintech applications of blockchain technology usually rely on its ability to execute "smart contracts". These are self-executing pieces of computer code that automatically execute actions when specified conditions are satisfied. The parties need not manually check the satisfaction of the condition and then separately affirm the action (e.g., payment upon delivery, or release of a loan upon satisfaction of a condition precedent). This reduces the possibility of human error and also frees up resources for other tasks.

To some extent, smart contracts are only an automated way of performing contractual obligations, and established principles of contract law will apply. But some new legal issues can arise: What are the parties' rights and remedies where the code is faulty or is hacked (like in the Ethereum DAO hack)? Since the blockchain is an immutable ledger, will

it be easy to void voidable contracts or to rescind a contract? We have suggested in our detailed paper on the subject that parties retain a natural language version of the contract at least until the legal system can provide some certainty on smart contract adjudication. Nonetheless, the legal services industry will likely have to adapt soon to accommodate non-natural-language contracts.

Corporate recordkeeping

The blockchain is at its core a recordkeeping technology, and one of its uses that many are excited about is in corporate recordkeeping. The blockchain can be used to create and maintain the many registers that companies are required to maintain, such as registers of their shareholding, transfers, and charges (encumbrances). The difference between this and mere computerisation is that these records achieve consensus among the company, the regulator, and the general public. This avoids claims later made due to alleged discrepancies.

The U.S. state of Delaware (the preferred jurisdiction for U.S. companies to incorporate in) has been very vocal about the benefits of blockchain technology, and just became the first U.S. state to allow its use for corporate recordkeeping. Earlier this month, SEBI constituted the "Committee on Financial and Regulatory Technologies" to advise it on fintech trends, including blockchain technology.

There are no signs yet of the Ministry of Corporate Affairs showing interest in the technology, but one guesses that if the technology proves successful in Delaware, it will quickly spread worldwide.

Real Estate

The recordkeeping advantages of the blockchain also make it an ideal technology for real estate records. Most readers will be aware of the complexities of land titling in India, and the abyss of related disputes pending in courts throughout the country.

If land titles are on the blockchain, it drastically the possibility of competing claims to a given parcel of land. This is because the blockchain will store an open record of ownership and other property interests of every parcel of land in a given territory. The state of the ledger at any given point in time can be called for. Arguably, this could also be done through the proper computerisation of existing records. But the blockchain has the added

advantage of decentralising the record-keeping process so that the possibility of manipulation at the government level is eliminated or greatly reduced.

According to a recent report, Andhra Pradesh and Telangana are exploring the use of blockchain technologies to improve their land registries. Some countries abroad are in the later stages of implementing the technology for this purpose, and there have already been some land transfers executed using the blockchain. Like with corporate recordkeeping, moving land titles to the blockchain in India will need amendments to registration laws and physical signing requirements, but if the technology proves powerful enough, those should not be controversial.

THE CRYPTOCURRENCIES

The second vertical i.e., cryptocurrency trade, is also seeing a lot of activity, with the price of bitcoin now hovering around the US $4000 mark (compared to under US $600 just a year ago). Ethereum's growth is even more exponential, seeing a nearly 2800% increase in the last year.

The leading exchanges in India are seeing a growth in the number of users as well as transactions. However, volumes in India are low compared to global numbers. Exchange operators feel that this is because of a lack of regulatory certainty, and as a result, a circumspect public. Also, cryptocurrencies are selling at a significant premium in India compared to global rates. One reason for this could be that there is regulatory uncertainty in India about cross-border trade in cryptocurrencies, so the supply is not as dynamic as elsewhere.

To delve deeper, the Foreign Exchange Management Act (FEMA) regulates the flow of money into and out of India's borders. But cryptocurrencies are inherently cross-border i.e., they do not "exist" in any particular jurisdiction, but rather on the borderless internet. It is hence difficult to fit the trading of cryptocurrencies into the concepts of FEMA, which were created keeping in mind fiat money and traditional goods and services.

Cryptocurrencies also pose interesting interpretational issues in taxation i.e., whether they are to be treated as assets or currency. Some countries like Australia have decided to

exempt cryptocurrency purchases from goods and services tax by treating them as currency.

Cryptocurrencies have gained somewhat of a murky reputation because of their association with well-known ransomware attacks like WannaCry and sketchy operations like OneCoin. However, cryptocurrency transactions are highly traceable (as opposed to cash). As a result, in a recent investigation, the platform Zebpay was able to assist law enforcement in tracking culprits who attempted to siphon funds from Bank of Maharashtra accounts.

As mentioned above, the government is expected to make some sort of announcement on the regulatory position surrounding cryptocurrencies soon. Our firm advocated the adoption of self-regulation with government oversight to the committee. Self-regulation can be dynamic, evolving with the pace of the industry, while at the same time ensuring consumer protection through KYC norms and prudential requirements like minimum capital, reserves, insurance etc.

Certification by a neutral body, with government oversight, can work to ensure the public that certified entities are credible and will be held accountable for lapses. In addition, of course, generally applicable laws like the Indian Penal Code and the Consumer Protection Act will continue to apply to the industry.

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