

Blockchain, the Law and Dubai's Grand Plan

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Blockchain is the technology used to maintain the digital currency bitcoin, and it can be used to facilitate instant payments. There is a public digital ledger of all Bitcoin transactions that efficiently shares and tracks information, and is highly suited to serve as a form of incorruptible and unalterable form of receipt, or proof of all transactions, shared on a network.

However the uses of blockchain technology extend far beyond Bitcoin, or even use at retail points of sale. Dubai believes that using blockchain technology on an Emirate-wide level will drive an efficient business public sector environment and accelerate its development as a trading and financial hub. Dubai Government agencies are now evaluating the potential of blockchain technology to track the import and export of goods traded across the MENA region. These agencies are currently collaborating with the global company IBM to achieve this.

Although blockchain technology has not yet been utilized widely for commercial use, the technology is attracting notice from major global players. Blockchain technology has attracted attention in the financial-services, supply-chain management, healthcare and shipping sectors. One global company testing the technology is Wal-Mart, which is using the technology to improve the way food is tracked, transported and sold to consumers across China.

The shift to using blockchains could slash costs, including, for example the cost of maintaining and exchanging in real-time information about warehousing and inventory. The Dubai Department of Economic Development believes that the potential benefits may be immense. Blockchain technology offers the potential to speed up transactions, increase transparency and accountability in multiple dealings and reduce levels of fraud and money laundering. Trade is Dubai's biggest business, and the use of blockchains could enable business and government to leap into paper-free systems, with smart and verifiable contracts, eliminating the multiple copies of paper documents used track, ship and sell goods.

Many factors remain to be considered before Dubai deploys this technology on a large scale. One area of concern is cyber security. Because the technology has yet to be used on a large scale, it remains to be seen whether the security will truly protect important transactional information in an impregnable fashion. Supporters of blockchains claim they are secure by design; however, a number of recent hacking attacks against digital currency records have raised concerns.

Another factor to be considered is regulatory uncertainty. In this regard, legal frameworks across the globe will have to adapt. Dubai aims to be at the forefront of the technology and to be the first city built on blockchains. Along with the challenge of adapting its legal framework, Dubai and its residents will face technical challenges to integrate blockchain databases with existing systems. Furthermore, additional factors include the high costs associated with the shift to the new technology.

Dubai has already initiated a citywide effort to use blockchains. Over the subsequent months, Smart Dubai, will run workshops to educate the public and private sectors about the technology's potential, meet with government, semi-government and private organizations, to identify and prioritise the industries and services which can benefit the most from this technology, and implement pilot projects to be conducted this year. Smart Dubai is a project supported by a framework between government, private-sector and

institutional partnerships to encourage engagement and collaboration in achieving the vision of His Highness to make Dubai the happiest city on Earth.

Major organisations in Dubai have already begun testing blockchain technology. The Dubai Department of Economic Development, the government agency which registers companies and business, issues commercial licenses and protects consumer and business rights, has shifted its entire business registration and licensing system to blockchain. Another participant in the shift is Emirates NBD Bank; in February 2017, Emirates NBD began cooperating with IBM to use blockchain for trade finance and logistics.

Dubai has set its eyes on accomplishing its goal to be a city built on blockchains by 2020. If it succeeds, Dubai will lead its business sector into the terrain of the future; a paper-free digital environment allowing information to be stored in a digitally secure, verifiable and incorruptible form.