

Blockchain: Challenging the status quo

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From Dubai to Silicon Valley, tech evangelists and investors alike are buzzing about the potential of blockchain to revolutionise and challenge almost everything.

What once began as the backbone for making financial transactions with Bitcoin, blockchain is now poised to shape the future by redefining transactions and operations in a wide range of industries.

The World Economic Forum describes blockchain as a technology that challenges the status quo. By using math and cryptography, blockchain provides an open, decentralised data base of any transaction involving money, value, goods, property, work or even votes, creating a record whose authenticity can be verified by an entire community.

“The uses of blockchain technology are endless,” explains a video by the World Economic Forum on the uses of the technology. “Some expect that in less than 10-years it [blockchain technology] will be used to: collect taxes; it will make it easier for immigrants to send money back to countries where access to financial institutions is limited; financial fraud will be significantly reduced as every transaction will be recorded on a public and distributed ledger, which will be accessible to anyone who has an internet connection.”

Today, a number of organisations use blockchain, including 15% of financial institutions. The impact of this technology is forecast to have a significant impact over the next few years. A survey of 800 executives and information and communications technology experts conducted by the World Economic Forum, reveals that 57.9% of the respondents believe that 10% of the global GDP information will be stored on blockchain technology by 2025.

The ease and flexibility of transaction is its biggest selling point. According to a Goldman Sachs Research report, the technology has the potential to eliminate the need for a middleman – which can lessen potential security concerns – and to speed up manual processes.

So, what impact will it have in the MENA region? On its path towards a smart city and a paperless society, the UAE has been quick to acknowledge the potential of blockchain and have been pioneers in adopting the technology in the MENA region and the world.

Following the launch of the Dubai Blockchain Strategy in October 2016, which aims to make Dubai the first government in the world to apply all transactions through this network by 2020, the Dubai Land Department (DLD) created a smart and secure database that records all real estate contracts. This makes DLD the first government entity in the world to implement all its transactions through the blockchain network. It's unsurprising, Dubai has made no secret of its goal to become a smart city.

DLD will use a blockchain system it has created to produce a secure database that records all real estate contracts, including lease registrations, and links them with the Dubai Electricity and Water Authority, DEWA, the telecommunications system, and various property-related bills.

Dubai's Blockchain Strategy even gained world-wide recognition after it scooped the prestigious *City Project Award* in Barcelona last year, beating over 300 projects from 58 countries.

It's not just the UAE that is finding benefits for the technology. Saqr Eriqat, Blockchain Evangelist at IBM, recently gave a talk on the technology in Abu Dhabi; Eriqat, who will be discussing the technology and its impact at this year's Cityscape Egypt Conference taking place at the Four Seasons Nile Plaza on the 12th and 13th March, makes the case that blockchain is rapidly moving into the mainstream as more organisations and governments look at adopting it.

He's right, the technology is currently being piloted by governments and organisations across the globe. The Indian state of Maharashtra, whose centre is Mumbai, plans to test blockchain technology for different use cases. Maharashtra plans to conduct five or six pilots to assess blockchain technology; the government aims to use the technology for land registry, supply chain financing, financial inclusion, car registration and insurance.

India is not the only one. Last year, Russia announced it would implement blockchain to register data from the Unified State Register of Real Estate, with a focus on the city of Moscow. The government is hoping that the technology would stimulate more confidence in real estate transactions and would support the security of property rights. Should the project prove successful, the government will look to permanently implement blockchain.

Blockchain's uses are truly endless. It's been said the technology will also revolutionise the healthcare industry as health records could be read and updated from multiple locations or services. MIT researchers are currently developing a system, which will integrate current healthcare software. A game-changer for the medical community.

It's also being used in power generation. Blockchain enables homeowners in Brooklyn, New York to sell back energy to the grid without going via an energy provider, and today these homeowners can buy and sell energy they have generated with rooftop solar panels. "The blockchain allows them to set their own price – and to do so without a price-setting, commission-taking intermediary," according to a recent report in *The Guardian*.

Drawing on the technology to reduce corruption and fraud, the United Nations has several blockchain-based projects. "Last year, in a UN world food programme pilot project, Syrian refugees in a Jordan camp were given an allowance in cryptocurrency. When making purchases at the camp supermarket, their identities were authenticated by iris scans and their spending deducted from their allowance. This cuts down on transaction fees for the UN and reduces the frequency of fraud and theft," as reported by *The Guardian*.

While we're only just beginning to scratch the surface of blockchain's potential, it's clear that the technology is not just a fad – as critics state – but here to stay.