The Impact of Blockchain, Cryptocurrencies and Bitcoin in UAE

1-What is Blockchain Technology?

Analysis

Blockchain, developed in response to the emergence of cryptocurrencies, is an ever growing list of records that irreversibly stores all details of transactions, once a transaction has been completed it forms part of the blockchain permanent database. The blocks are linked and secured using cryptography, ensuring that they remain tamper-proof and safe from hacking. The data can be easily distributed, but neither duplicated nor modified; thus these transactions are impenetrable and inerasable.

Blockchain serves as an open distributed database managed by a peer-to-peer network that records transactions between two parties on a connected system of registers. Such transactions do not necessarily need to be of the financial variety as the system is capable of recording any transaction of economic value. This system is decentralised and the records are public and easily verifiable, allowing for transparency and incorruptibility.

Unlike traditional banking, blockchain requires minimal human involvement in processing and is not
controlled as a single entity with the records existing in a shared and continuously updated database. Interestingly, blockchain technology is virtually incorruptible, as any attempt to alter the records would require an enormous amount of computing power to gain access to every computer on the blockchain network in order to successfully override the database.

2-What are Cryptocurrencies and Bitcoin?

Cryptocurrencies are a type of digital currency with a value dependent on people agreeing to trade goods and services in exchange for a higher amount of the currency under their control, and believing others will do the same. Blockchain technology was developed in response to the emergence of cryptocurrencies and acts as a database that records and contains evidence of all transactions between users.

The unprecedented success of cryptocurrencies can be attributed to the security and anonymity it provides to users. Bitcoin, considered the original cryptocurrency, has paved the way for an emergence of cryptocurrencies since its release in 2009. To date there are over 900 different types of cryptocurrency that can be used for buying or selling with other currencies, purchasing goods and services from providers who are willing to accept digital currency, investing in various assets or retaining the currency as an investment in itself.

Bitcoin (BTC), synonymous with the word cryptocurrency, is perhaps the most well-known of all virtual currencies. It allows users to exchange online credits for goods and services. Bitcoin was first created by an unknown person operating under the alias of Satoshi Nakamoto. When first introduced, the idea of a digital currency was a completely foreign concept with many people feeling that a non-physical currency not regulated by a central bank or government entity was doomed to fail.

Bitcoins are traded from one personal digitalised ‘wallet’ to another. The wallet consists of a small personal database that you store in your system, phone or your tablet. Globally, there are dozens of online Bitcoin exchanges and brokers.

-Blockchain operations in UAE.

The GCC in general, but more specifically the UAE, is moving towards a more technology based economy. Regional governments have already started to experiment with blockchain technology and its potential use in both the public and the private sectors.

a-Block Chain Council

In an effort to stay ahead of the curve, the Global Blockchain Council was established in Dubai to adopt the latest technologies and innovation practices on a global scale. The council is composed of 46 members, all of whom have the potential to become key players in the blockchain industry. Council members include a host of government entities, international companies, leading UAE banks, free zones, and other international blockchain technology firms, including Microsoft, Du, SAP, IBM, Cisco,
TECOM, Dubai Holding, Dubai Multi Commodities Centre, EmiratesNBD, Smart Dubai Office and Dubai Smart Government.

b-Dubai Blockchain Strategy

The Dubai Blockchain Strategy, launched by His Highness Crown Prince Sheikh Hamdan, was the result of collaboration between the Smart Dubai Office and the Dubai Future Foundation with the mission to continuously explore and evaluate the latest technology innovations in an effort to further improve the lifestyle of the city’s residents.

The strategy’s aim is to give an economic edge to all sectors and position Dubai as a leader in global technology.

In fact, the city of Dubai is, somewhat ambitiously, aiming to become the world’s first economy to have and operate with its own cryptocurrency by the year 2020.

The Dubai Blockchain Strategy is built on three pillars:

1. Government Efficiency: The new strategy will contribute to increased government efficiency by promoting widespread digitalisation. Official documents such as visa applications, bill payments and license renewals will be transacted digitally under the new strategy thus reducing carbon emissions, processing times and costs.

2. Industry Creation: The Dubai Blockchain Strategy will introduce a system for enabling citizens and partners to create new businesses using the shared ledger technology. Industries expected to benefit include: real estate, fin-tech and banking, healthcare, transportation, urban planning, smart energy, digital commerce and tourism.

3. International Leadership: Dubai will open its blockchain platform for global counterparts to enhance safety, security and convenience on a global level.

Many Government entities in Dubai are already testing the water and rolling out blockchain technology including the Dubai Land Department, the Dubai Department of Economic Development, Department of Naturalisation and Residency and the Dubai Municipality.

c-Emcash

Emcredit, a subsidiary of Dubai Economy, and the UK-based Object Tech Group Ltd will work together to develop and implement emCash, an encrypted digital currency operating with blockchain technology, which people can use to pay for various government and non-government services in Dubai.

d-DLD
The Dubai Land Department (DLD) became the world’s first government entity to adopt blockchain technology. The first-of-its-kind initiative in the global real estate sector, was launched under the slogan "Simple, Secure, Fast".

The blockchain database records all real estate contracts including lease registrations, and links them with the Dubai Electricity & Water Authority (DEWA), the telecommunications system, and other property-related bills.

e-DNIRD

The Department of Naturalisation and Residency Dubai (DNRD) aims to facilitate procedures for residency using biometrics systems and blockchain technology.

f-DED

The Dubai Economic Department (DED), meanwhile, signed memorandums of understanding with both Otonomos and MarketIQ to produce an innovative licensing procedure using the blockchain technology and Big Data, in an effort to reduce processing time for applications by 80%.

g-Smart Dubai

Agreements were further signed between Smart Dubai, Avanza Solutions and Consensys to standardise government services payment gateways using blockchain, and to create a cryptocurrency for Dubai.

h-Dubai Municipality

Dubai Municipality has signed memorandums of understanding with Renca and Winnow to legalise the 3D printing of building material in order to promote 3D printing in the construction industry, and to encourage the deployment of the Internet of Things (IoT) to reduce food waste across the hospitality sector.

4-Cryptocurrencies and Bitcoin operations in UAE.

In the region, Bitcoins can be bought and exchanged through Dubai based BitOasis, a secure platform offering the trade of cryptocurrencies and storage services for the MENA region.

Bitcoin is often purchased as a long-term investment, which is bought and held in the hope that its value will increase dramatically over time. Early adopters have been well rewarded, but there remains plenty of volatility.

An attractive feature of online exchange platforms like BitOasis is the option to buy fractions or “bits” instead of a whole Bitcoin, with investment starting from as little as $10 on some sites. Transaction fees
typically range from 0.2 to 1 per cent of the currency bought, plus bank transaction charges.

Bitcoins are stored in a “digital wallet”, either in the cloud or on computers, which can be directly linked to a purchaser’s bank account facilitating payment via bank transfer, mobile payments or with a Visa or MasterCard, or at Bitcoin ATMs such as one based at Dubai Media City.

Bitcoin supporters claim that because it is not controlled by any central bank, the currency is not subject to any inflationary pressures. However, Bitcoin cannot be considered a fool-proof investment, recently it suffered a 12% decrease in value as South Korean, Finance Minister Kim Dong-yem announced government plans to consider a ban on cryptocurrencies. Many exchange houses are looking to bitcoin to help reverse a decline in global remittances, for instance, UAE Exchange invested in two blockchain-based companies, Loyyal and Bankchain, in the first half of 2017 and is in talks with a third.

5-Are there other cryptocurrencies improving and innovating the system in UAE?

In the UAE, there are some trading platforms and cryptocurrencies of significance that are having an impact on the market, these include:

ArabianChain.

The ArabianChain, a local cryptocurrency to enable secure payments and money transfer, was founded in February 2016 and began trading in the market in April 2017. ArabianChain is the first company in the region to develop a public and decentralised platform for smart contracts on blockchain. The platform is particularly innovative as it also delivers workshops and educational sessions in an effort to increase blockchain competency within organisations and aiding companies in the MENA to successfully integrate blockchain technology.

OneGramcoin.

The Dubai-based OneGram jointly with GoldGuard, a gold trading platform, launched a sharia compliant cryptocurrency that is completely backed by gold. The company has already launched an Initial Coin Offering (ICO) offering, which aims to raise more than US $500 million in capital.

This new type of cryptocurrency uses blockchain technology to create a digital currency that is intrinsically linked to one gram of gold. The idea is that currency, backed by physical gold, guarantees safety and transparency for the buyer. The coin will be listed on a few digital currency platforms and some analysts have said OneGram is the closest coin that has ever come to knocking bitcoin off its pedestal because unlike Bitcoin, the coin always has a base price bring at least equal to the current price of gold.

Money Trade Coin.

Money Trade Coin, has taken steps to position itself as leader in cryptocurrency knowledge, launching
its coin, the Money Trade Coin Trading platform and exchange, and including the Cryptocurrency E-Academy, aiming to educate the young generations about the benefits of using and trading digital currencies along with an Online Service E-Portal. The management is aiming to set-up other businesses such as E-commerce and E-travel desk all based on the Money Trade Coin.

Money Trade Coin, coupled with an ultra-secure wallet, claims to be first fully secured cryptocurrency, which implements the highest standards of compliance with relation to the KYC and AML.

6-Which are the areas of concern about Blockchain and cryptocurrencies?

The challenges to the wider adoption of these technologies include: cyber security; regulatory uncertainty; lack of physical representation of the coin; mistrust of bitcoin related technology due to dark-web and criminal connotations; high energy consumption needed to complete transaction; questionable capability for smart contracts to accurately execute complex instructions; fear of disruptive potential that can often lead to adoption resistance; privacy and data-security on public blockchains and software compatibility issues.

These innovating technologies are an attractive investment vehicle, but are high risk because at the moment it is an unregulated market offering no protection.

7-Legal Aspects in the UAE.

a-Cryptocurrencies

Bitcoin is not screened by any governmental agency nor does it pass through any bank or financial institution, this creates significant challenges concerning government regulators and current laws.

Bitcoin’s “monetary policy” is written into its code: New money is issued every 10 minutes, and the supply is limited, a hard money rule is applied similar to the gold standard.

The UAE Central Bank published the “Regulatory Framework for Stored Values and Electronic Payment Systems” on January 1st, 2017 to promote consumer protection and financial stability. However, on February 1st 2017, the Governor of the UAE Central Bank issued a statement clarifying that “these regulations do not apply to bitcoin or other cryptocurrencies, currency exchanges, or underlying technology such as Blockchain,” as well as adding that virtual currencies are currently under review by the Central Bank and new regulations will be issued as appropriate based on evolution of concepts and adoption rates.

While waiting for new regulations to be issued addressing cryptocurrencies, one key question that needs to be addressed, is Bitcoin a currency or a Commodity?

If Bitcoin is deemed a commodity, then the UAE Securities and Commodity Authority has jurisdiction over local bitcoin exchanges but if it deemed a currency, it would fall under the regulatory authority of
the UAE Central bank. Further, if it ends up being considered a commodity, it may become subject to VAT. The UAE authorities have yet to clarify their position on the matter.

b-Blockchain.

The launch of the Global Blockchain Council and the adoption of the Dubai Blockchain Strategy demonstrates the position of the Dubai Government in recognising the potential of blockchain based technology.

The Dubai Supreme Legislation Committee further stated that the UAE, “should be among the first in the region and the world to establish a legislative framework and a financial and organisational structure for this technology.”

c-Smart Contracts

Amongst the various applications of the blockchain technology are smart contracts. Smart contracts probably have the most potential to alter the way companies do business.

As blockchain can actually process transactions and not just simply store transaction information, they can serve as a platform for “smart contracts”. These contracts are electronically drafted, executed and performed, eliminating the possibility of fraud or downtime by either party. It is a self-executing agreement and once created it produces its outputs autonomously. The more sophisticated the code, the more automated, self-executing, and smarter the contract.

Traditional forms of legal agreements suffer from several imperfections such as the inherent ambiguities in legal prose, the time-consuming process of signature pages between parties, possibility of being slowed down by human effort, the costs of creating contracts or performance where third-party input is required and the inefficient storage of legal documents.

Blockchain technology may provide much needed relief to some of these problems. However, some difficulty still lies in the fact that smart contracts cannot be easily rectified. In a scenario whereby a bug gets in the code or incorrect details are entered at the time of submission it is unclear how it can be rescinded. Traditionally, contracts are rescinded in court but in the case of smart contracts it remains to be seen how it can be rescinded or if it must be performed regardless of the irregularities.

UAE

Federal Law No. 1/2006 on Electronic Commerce and Transactions appears to allude to “smart contracts” in its Article 12 as it states that, “Contracts between confidential electronic mediums that include two or several electronic information systems, designed and programmed in advance to perform so, shall be deemed valid, enforceable and giving its legal effects even in the instance of no personal or direct interference of any physical person,” adding that, “concluding contracts between a confidential electronic information system in the possession of physical or juristic person and another physical
person is further allowed should the latter know or is supposed to know that the system shall conclude
the contract automatically.” This is an important first step towards the regularisation of these
technologies in the UAE that complements the UAE Governmental strategy in becoming pioneers in
adopting innovative technologies.

Nevertheless, and as an emerging technology promising self-executing contracts with little human
intervention, smart contracts give rise to some entirely new legal challenges and any attempts to subject
smart contracts to existing laws may create challenges and raise enforceability questions which need to
be addressed by the development of a legal framework under which blockchain can be properly
adopted.

8-What is the situation with Initial Coin Offerings and the DFSA position regarding them?

A number of organisations around the world have taken to digitally raising funds through "Initial Coin
Offerings" (ICOs), whereby investors pay using cryptocurrencies or conventional currencies in
exchange for a new cryptocurrency created and issued by a company (real or virtual). This company
then uses the currency raised to hold assets and fund projects allowing cryptocurrencies to be treated
as an equity investment.

The DFSA Statement.

On September 13 2017, the Dubai Financial Services Authority (DFSA), issued a "General Investor
Statement on Cryptocurrencies," stating that ICOs should be considered high risk investments due, in
part, to the complex systems and technology that support them. According to the General Statement,
“they have their own unique risks, which may not be easy to identify or understand; such risks may
increase where offerings are made on a cross-border basis.” It further added that, “these offerings
should be regarded as high-risk investments.”

The DFSA further made clear that it does not currently regulate these types of product offerings or
license firms in the Dubai International Financial Centre (DIFC) to undertake such activities.
Accordingly, before engaging with any persons promoting such offerings in the DIFC, or making any
financial contribution toward such offerings, the DFSA urges potential investors to exercise caution and
undertake due diligence to understand the risks involved.