

Decrypting Cryptocurrency: The New Face of Money

Swetang Vin examines the rise of disintermediated currencies, and what that means for CFOs

In our highly digitised world, where nearly every transaction is virtual, it is not surprising that cryptocurrency has emerged as a powerful force that could change the very definition of money. Rightly called a 'techno tour de force' by Bill Gates, it could well revolutionise financial transactions, investments, payments, even and what it means to have wealth. Personally, I am very interested in the highly democratised nature of this new currency. It's not created, governed or distributed by singular, regulatory entities but by people, unconstrained by geographical boundaries, who are connected only by the worldwide web, using a mathematical framework or code to 'mine' this currency.

Let me explain.

In the beginning...

A year after the GFC, developer Satoshi Nakamoto created Bitcoin, the world's first cryptocurrency, using approximately 2,000 lines of code. Bitcoin's security was maintained via blockchain, a secure, distributed ledger that a public community can record and verify. With Bitcoin, Satoshi laid the blueprint of an online exchange where two parties could exchange tokens of value anonymously, sans banks, payment processes, and companies – and beyond the sphere of a national currency like the Rupee.

The gold rush for Bitcoin

Today, anyone can participate in 'mining' Bitcoin, which really

Tracing back to 2009, Bitcoin now has over a million users in India alone



means verifying the exchange of cryptocurrency, and earning currency units in return. Mining has created a digital 'gold rush' for hobbyists and professionals, who use computers with specialised processors to provide 24/7 digital 'book keeping services' to the coin network in exchange for a fee. The earnings can be used to purchase goods or services, exchanged at an online currency exchange for conventional cash, or stored in a virtual wallet. There are many kinds of cryptocurrencies, but Bitcoin has taken the lead. Its usage is spreading rapidly, and as of December 2017, there were over 21 million blockchain wallet users.

A digital currency for a digital India?

India is one of the world's most cash-intensive economies, but the deployment of the Unified Payment Interface (UPI) in early 2016 enabled users to transmit money using an Aadhar ID and mobile number. This set the stage for banks and private players to set up digital wallets. In fact, the nation's growing affinity for online transactions allowed India's leading Bitcoin exchange, Zebpay, to cross the Rs 100 crore turnover

mark within 10 months of starting operations in April 2016.

Then came demonetisation. A cash-short India began relying more heavily on digital wallets like Paytm, and online payment systems, to deal with the crisis. 17 per cent of Indians owned a smartphone in 2016, and their trust with digital wallets in the face of demonetisation meant that more people become comfortable with digital currency.

Leading Indian Bitcoin start-ups witnessed a surge of new users, triggering significant investor interest in cryptocurrency usage in India. In September 2017, blockchain, the world's largest digital asset platform, announced a partnership with Bitcoin exchange Unocoin to seamlessly fund wallets, free up settlement delays, safeguard against untrustworthy service providers, and institute opaque identity verification procedures.

At last count, India was home to one million Bitcoin users, who conducted transactions of 1,000-2,000 coins, or approximately Rs 10-20 crores a day. Today, Rupee-denominated Bitcoin is believed to generate the third-biggest trading volumes, after dollars and Yen. (As of early February, one Bitcoin was worth about Rs 390,944.)

Volatility

With USD 100 billion of investor wealth wiped out in just 24 hours on the 2nd of February, cryptocurrency is now the most 'volatile asset in the global marketplace'. The immediate cause for this plunge was China's crackdown on Bitcoin exchanges,

Keeping your coins safe

As India mulls the issue, it's critical to know how to keep this new form of money safe. The simplest way to do this is to treat it like physical gold, and not to rely on a single wallet to store all of one's holdings. Instead, holdings should be spread, in small amounts, across multiple wallets, minimising the risk of hacking. For larger amounts, it is prudent to use a hard drive that is not connected to the Web.

Like with all financial transactions, do not share any confidential information pertaining to cryptocurrency with

anyone. Since cryptocurrency thrives on the paradigm that no one individual or entity controls it, miners are expected to comply with the highest standards of cybersecurity, and constantly update their safety protocols to ward off a breach.

Bitcoins are being increasingly used in India to purchase apps, buy vouchers, pay bills, or to top-up mobile talk-time. As such usage grows, security concerns alone will create pressure to legalise cryptocurrencies. In the interim, many Indian Bitcoin exchanges are setting up security checks, including the use of PAN or Aadhar numbers.

trading platforms, and fundraising through cryptocurrency, including Initial Coin Offerings. China's abundance of cheap energy and hardware, so essential for 'mining', have long made it the ideal destination for the task – but the recent move caused valuations to dip, and trading quickly migrated to Japan. Looking further back, Japan – which has also seen a huge Bitcoin boom – saw its biggest (and once the world's largest) Bitcoin exchange, Mt Gox, collapse in 2014 following a hacker-attack.

Far from deterring investors, high volatility makes cryptocurrency an attractive investment proposition – much like investing in stocks.

A regulatory grey zone

The catch is that, because cryptocurrency transcends the existing laws concerning currency, foreign exchange, and security transactions, it is now being heavily scrutinised by regulatory bodies the world over, including in India.

The RBI considers cryptocurrency a violation of India's current forex norms due to its unregulated nature and lack of compliance with any central banking mechanisms. Further, in the recent Union Budget, the Finance Minister categorically ruled out the use of any of the existing cryptocurrencies as legal tender.

India has refused to legitimise cryptocurrency usage, but the government will eventually use its underlying technology - blockchain

However, the FM did acknowledge blockchain's importance as a 'distributed ledger system', and said that the government will explore the use of this technology for ushering in a digital economy. The RBI has now asked experts to review a fiat version of cryptocurrency that serve as a digital alternative to the Rupee. If India does go ahead with what it tentatively calling 'Lakshmi', it would put the country on par with China, Russia, and Estonia, which are all considering their own cryptocurrencies.

More than just coins

With digital currencies like Bitcoin and Ethereum experiencing three-digit gains, it is likely that cryptocurrency is here to stay and thrive. Global institutional investors,

including the likes of Goldman Sachs, have taken notice, with their stakeholders becoming increasingly curious about this unique asset class. Former RBI Governor Raghuram Rajan has said that that the RBI could use digital currencies to move India towards a cashless society.

As international borders blur in terms of financial transactions, and as we move towards a digitised world, it's not too far-flung to think that this FinTech revolution will bring sweeping changes in how we define and use money. It's worth investing your time to educate and prepare yourself for it.

What blockchain means for Finance Leaders

For Finance leaders, the most interesting development to track is not cryptocurrencies, but the technology behind the. Blockchain promises to bring operational improvements and cost efficiencies to many businesses. Soon, for instance, Finance departments may never again have to reconcile various sets of intercompany accounts, or resolve a financial dispute with a vendor, wait for a payment to clear, or set aside collateral to cover counterparty risk. All of this is theoretically possible with the use of distributed ledgers.

A recent surveys highlights that 14 per cent of over 200 respondents from financial institutions plan to go into blockchain production on a large scale, while 15 per cent expect to have some form of commercial blockchain application up and running. Judging by the accelerating pace at which blockchain initiatives are making headlines, it's hard to imagine that the technology won't have an impact on the world of Finance. Indeed, experts believe that companies that don't adopt distributed ledger technology in some form will only be hastening their obsolescence. ■



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