Posted by Khushboo Uchat Feb 1, 2021

As a result of distributed ledger learning journey, I am supposed to share my thoughts over blockchain technology and how it can be useful in practical use-case. I thought to take it one step ahead and write a blog about it so that it can reach to wider audience.

In 2008, when the whole world was struggling with recession and financial crisis, somewhere in one corner of the world A person (Or group of persons may be) named Satoshi Nakamoto has invented a ledger system for crypto currency 'Bitcoin'. In simple words, you can consider blockchain as a database where record can not be deleted as well as updated. If you want to update anything then copy of the record is created with updated value but still old record exists in the system for maintaining the history.

Blockchain has a huge crowd around it that cherishes and admires its capabilities. It can be useful in many of the industries and one of them is Banking & Finance. We have already seen how cryptocurrencies has revolutionized the industry and the power it brings to the table as truly peer to peer currency. By end of 2020, 92% of United States and European and U.S financial and banking institutions have started blockchain technology adoption. The major reason behind it is that this technology is able to reduce the cost of banking infrastructure by 30%. The key areas where Blockchain is being adopted are

Peer to Peer Transfer System

When any person wants to send some money to other person internationally then lots of middle parties get involved and it is really tedious process. There are lots of challenges in this process including exposure of sensitive data to third party, third party authentication issues and charges at each and every stage of the process. Blockchain brings power to eliminate all third parties and enables the use of a decentralized ledger system for peer-to-peer money transfers. Moreover blockchain money transfer happens in real-time so the receiver can instantly access the money once it is transferred.

Trading Platforms

When it comes to trading activities, still lots of activities we do on paper or on call and records are maintained in form of physical paper and whenever required people spend time in search of the particular record. So overall loots of manual efforts are involved. Blockchain can revolutionize this space if we have the blockchain enabled trading platform. It will reduce the time consumed in a manual process, bureaucracy, and paperwork as there will be no need to maintain multiple copies of trading data with a blockchain system, and information will be available in secured digital documents.

Fund Raising By Blockchain

The financial industry is driven crazy whenever there is a big fund raising process as it includes lots of complicated activities like collaboration, take part in wide length meetings with partners, long negotiation on equity and valuation, and wish to exchange. Blockchain has made this process fast and easy by providing alternatives of Initial Public Offering (IPO) which is called Initial Coin Offering (ICO).

Blockchain & Hedge Funds

The hedge fund is the investment partnership that includes a group of investors and a fund manager, which involves limited partners. However, these people are usually traders and are mainly focused on increasing investor returns and reducing the chances of loss. In the recent couple of years, cryptocurrencies have doubled the hedge fundraising. Actually, a decentralized mechanism caters to an open platform for investors to participate with more transparency.

From the above the advantages of block chain is clearly visible. But If we look beyond the cryptocurrencies then blockchain is still failing to make impact. It has number of challenges associated with it mainly

- It is a great energy consuming platform and over the years when the world is emphasizing on saving the energy ask yourself. Does it make much sense to burn the energy equivalent to
 - Switzerland's annual energy usage just to generate the bitcoin?
- Blockchain mining does not provide network security. The problem is that when miners can assemble a coven (in Bitcoin's case, >50% of mining power) they can rewrite or alter the blockchain record. If this is possible, the security of data disappears.
- Scalability remains issue. Bitcoin is the most successful blockchain implementation and yet just one in every thousand people can use it. Given its sluggish transactionprocessing speed, significantly increasing the number of active users isn't practical.

Beyond Technical Challenges there are number of legal challenges as lots of countries has put the ban on cryptocurrencies and in other countries there is no clear law indicating the bright future. Just before two days Indian government has proposed to launch its digital currency and ban all other crypto currency. This puts lots of question mark on future of crypto currencies but still blockchain remains as one of the strongest alternative to existing technologies.

Though lots of enterprises are ready to invest and adapt the technology, as a whole Blockchain has long way to go before people start accepting it as one of the powerful platform to change the world around us.

95 Views Tags: blockchain, blockchain community, technology 2021



▶ Sharat Koya in response to Chris Combe on page 3

Feb 23, 2021 11:26 AM

So cardano like other non-ethereum networks all suffer from one problem: A lack of widespread adoption. We can be as protocol agnostic as we like but what we have found is that despite the architectural or capability benefits, there no point adopting a protocol if there is no market to sell to on the protocol. I am working on a model that illustrates adoption across all the 3rd gen blockchains and compares with Ethereum and Ethereum 2. Will update the paper (hopefully next week), once reviewed.



Alice Gonzalez Feb 23, 2021 10:14 AM

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Khushboo Uchat

Feb 20, 2021 4:12 PM

Sharat Koya.. I agree, even though the challenges are significant, blockchain is going to stay with us. Decentralized finance is convincing lots of people as alternate to regular centralized finance. As Chris Combe mentioned, Cardano is taking it to next level by addressing the obvious challenges like scalability and energy consumption by using proof of stake technology rather than using proof of work technology. Also it will be very interesting to see how ADA takes over in future as very recently in Jan 2021 they teamed up with Ergo to address the key defi challenges. Interesting read of Ergo Summit

https://cointelegraph.com/press-releases/ergo-and-cardano-teams-to-explore-key-defi-challenges-at-ergo-summit



Chris Combe in response to Sharat Koya on page 4

Feb 19, 2021 10:30 AM

I've seen even further progress with Cardano e.g. ADA - have you checked that out, the creators seem to be taking it even further (I'm a crypto "noob", however I did find it interesting / compelling)



Hi Khushboo Uchat

So whilst its true that DLTs that use PoW as a consensus algorithm have scalability challenges due to the amount of energy consumption there are alternatives. Some vendors now create PoS side chains to execute transactions at low gas fees and without mining and then periodically update a ledger like Ethereum to prove that the transaction happened.

if you would like to learn more head to http://goto/dlt



Khushboo Uchat in response to Nishith Kumar on page 4

Feb 3, 2021 5:04 PM

Nishith Kumar.. Thanks for the appreciation. As you mentioned Blockchain is something which excites everyone due to crypto currency but independently as technology it has lots of challenges and it might take some time before it matures as full fledge development framework. Though Etherium is a good start as development platform for smart contracts, I would like to see more such platforms to be accepted.



Nishith Kumar

Feb 2, 2021 9:33 AM

This is interesting. Thanks Khushboo Uchat

There's money chasing and unlimited scope for innovation in there, so people are jumping aboard. Also, some of the obvious pain with fiat currency as you rightly pointed out.

Though we know the energy footprint leaves a crack open for other AltCoins (as they call it) to rush in. Ether and some other DeFi coins are way more efficient in decentralized finance handling. They've come a long way in recent years. Also work being done to avoid cartels which give way to the high price volatilities that these alt investments exhibit.

Interesting topic for sure, so look forward to more such content coming!