# **Blockchain: The New Generation Of Internet**

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## **Abstract:**

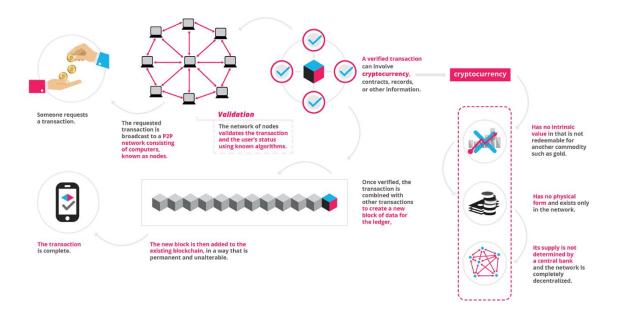
The blockchain technology first came into existence when the cryptocurrency was launched in 2006. Since then We realized that this technology has this much potential to bring the revolution and evolve the ways how everything works to a whole new level . It can make global impact in digital world which now runs almost everything like transaction , transference of data , communication and many more things preserving the privacy of the users. So we have been working on this idea to make a new generation of the internet where almost everything like browsing internet , communication , games and apps will be used using this same technology and peer to peer approaches We documented and categorized the current uses of the blockchain, and provided a few recommendations for future work to address the above mentioned issues.

# 1.INTRODUCTION

The main idea behind blockchain technology in its ability to offer a platform where you can transfer data more securely. It creates a ledger which is shared to everyone and it can't be altered since it is visible to every person or node that's involved in the following process or the transference of the data . Blockchain technology can provide the security to every business and every works whether it's the government related or highly classified or private sector .

The decentralized nature of blockchain makes it impposible for the hacker to get the backdoor

The <u>applications of blockchain</u> are almost endless, many already discovered, some being tested and others still yet to be discovered- they go beyond digital currencies and money transfers. It can work for all transferrence of data involving value (goods, money and title).



# 2.METHODOLOGY

# 2.1 What is Blockchain Technology?

"The blockchain is an incorruptible digital ledger of economic transactions that can be programmed to record not just financial transactions but virtually everything of value."

## 2.2 A distributed database

Picture a spreadsheet that is duplicated thousands of times across a network of computers. Then imagine that this network is designed to regularly update this spreadsheet and you have a basic understanding of the blockchain. Information held on a blockchain exists as a shared — and continually reconciled — database. This is a way of using the network that has obvious benefits. The blockchain database isn't stored in any single location, meaning the records it keeps are truly public and easily

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verifiable. No centralized version of this information exists for a hacker to corrupt. Hosted by millions of computers simultaneously, its data is accessible to anyone on the internet.

# 2.3 Blockchain as Google Docs

. The problem with that scenario is that you need to wait until receiving a return copy before you can see or make other changes because you can't do anything until the other party leaves it. . That's how databases work today. At the same time more than one owner can't make changes to the document. This is the way bank works when a person deposits the money in account they can't instantly see it until the banks completes its work and they can't start until the person leaves the counter or just complete the transaction. With google docs its same document shared with everyone at the same time its like shared ledger but it shared document. The distributed part comes into play when sharing involves a number of people.

So what our idea was to use this same thing in all the bussiness by sharing the documents instead of waiting back and forth for the other task anyone can see it the idea here is that if anyone one make changes to any documents then it will affect the chain and alert everyone because it will be accessible everyone that way we can make it less corruptible .

# 2.4 Blockchain Durability and robustness

Be controlled by any single entity.

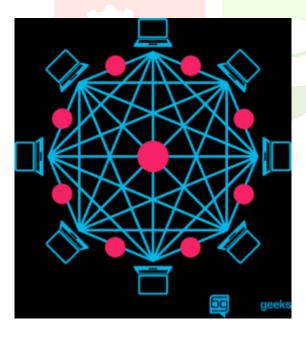
Has no single point of failure.

# 2.5 Transparent and incorruptible

The Blockchain network is in consensus state. It keeps updating the block in every 10 minutes and verifies all the blocks that are being added in the blockchain that way it will prevent the corruption because if any changes is made in any of the block it will alert everyone having the shared ledger.

# 3.A NETWORK OF NODES

A network of so-called computing "nodes" make up the blockchain.



### Node

(computer connected to the blockchain network using a client that performs the task of validating and relaying transactions) gets a copy of the blockchain, which gets downloaded automatically upon joining the blockchain network. Together they create a powerful second-level network, a wholly different vision for how the internet can function. Every node is an "administrator" of the blockchain, and joins the network voluntarily (in this sense, the network is decentralized).

# 4.THE IDEA OF DECENTRALIZATION

By design, the blockchain is a decentralized technology.

Anything that happens on it is a function of the network as a whole. Some important implications stem from this. By creating a new way to verify transactions aspects of traditional commerce could become unnecessary. Stock market trades become almost simultaneous on the blockchain, for instance — or it could make types of record keeping, like a land registry, fully public. And decentralization is already a reality. We can use this idea to build apps like everything in Dapps .

# 5.WHO WILL USE THE BLOCKCHAIN

This technology can be used anywhere like Banking sector, Transportation sector, It can be used in any business schools and colleges .Because itv can provide the security and assurance about everything to the public or customers.

# 6.THE BLOCKCHAIN AND THE ENHANCED SECURITY

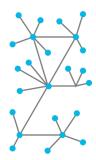
By storing data across its network, the blockchain eliminates the risks that come with data being held centrally.

# Centralized

# Decentralized

# Distributed Ledgers









### The New Networks

Distributed ledgers can be public or private and vary in their structure and size.

**Public blockchains** 

Require computer processing power to confirm transactions ("mining")

- Users (•) are anonymous
- Each user has a copy of the legder and partipates in confirming transactions independently
- Users (•) are not anonymous
- Permision is required for users to have a copy of the legder and participate in confirming transactions



# 7.SECOND LEVEL NETWORK

With blockchain technology, the web gains a new layer of functionality.

Goldman Sachs believes that blockchain technology holds great potential especially to optimize clearing and settlements, and could represent global savings of up to \$6bn per year.

"2017 will be a pivotal year for blockchain tech. Many of the startups in the space will either begin generating revenue – via providing products the market demands/values - or vaporize due to running out of cash. In other words, 2017 should be the year where there is more implementation of products utilizing blockchain tech, and less talk about blockchain tech being the magical pixie dust that can just be sprinkled atop everything. Of course, from a customers viewpoint, this will not be obvious as blockchain tech should dominantly be invisible – even as its features and functionality improve peoples'/business' lives. I personally am familiar with a number of large-scale blockchain tech use cases that are launching soon/2017. This implementation stage, which 2017 should represent, is a crucial step in the larger adoption of blockchain tech, as it will allow skeptics to see the functionality, rather than just hear of its promise."

# Web 1.0 / 2.0 / 3.0 Summary

Crawl Web 1.0	Walk Web 2.0	Run Web 3.0
Company Focus	Community Focus	IndividualFocus
Home Pages	Blogs / Wikis	Lifestreams / Waves
Owning Content	Sharing Content	Consolidating Content
Web Forms	Web Applications	Smart Applications
Directories	Tagging	User Behavior
Page Views	Cost Per Click	User Engagement
Banner Advertising	Interactive Advertising	Behavioral Advertising
Britannica Online	Wikipedia	The Semantic Web
HTML/ Portals	XML/RSS	RDF / RDFS / OWL

# 8.RESULT

### Web 30

The blockchain gives internet users the ability to create value and authenticate digital information. What new business applications will result?



Distributed ledgers enable the coding of simple contracts that will execute when specified conditions are met.



By enabling peer-to-peer payments, the blockchain opens the door to direct interaction between parties – a truly decentralized sharing economy results.



Blockchains take this interest to the next level, potentially creating crowd-sourced venture capital funds.



By making the results fully transparent and publically accessible, distributed database technology could bring full transparency to elections or any other kind of poll taking.



Distributed ledgers provide an easy way to certify that the backstories of the things we buy are genuine. Transparency comes with blockchain-based timestamping of a date and location — on ethical diamonds, for instance — that corresponds to a product number.



Decentralizing file storage on the internet brings clear benefits. Distributing data throughout the network protects files from getting hacked or lost.



Prediction markets that pay out according to event outcomes are already active. Blockchains are a "wisdom of the crowd" technology that will no doubt find other applications in the years to come.



Smart contracts can protect copyright and automate the sale of creative works online, eliminating the risk of file copying and redistribution.



### Internet of Things (IoT)

Smart contracts make the automation of remote systems management possible. A combination of software, sensors, and the network facilitates an exchange of data between objects and mechanisms.



Blockchain technology enables the buying and selling of the renewable energy generated by neighbourhoodmicrogrids.



Distributed ledgers offer enhanced methods for proving who you are, along with the possibility to digitize personal documents. Having a secure identity will also be important for online interactions – for instance, in the sharing economy.



### AML and KYC

Anti-money laundering (AML) and know your customer (KYC) practices have a strong potential for being adapted to the blockchain. Currently, financial institutions must perform a labour intensive multi-step process for each new customer. KYC costs could be reduced through cross-institution client verification, and at the same time increase monitoring and analysis effectiveness.



In the future, users will have the ability to manage and sell the data their online activity generates. Because it can be easily distributed in small fractional amounts, Bitcoin — or something like it.



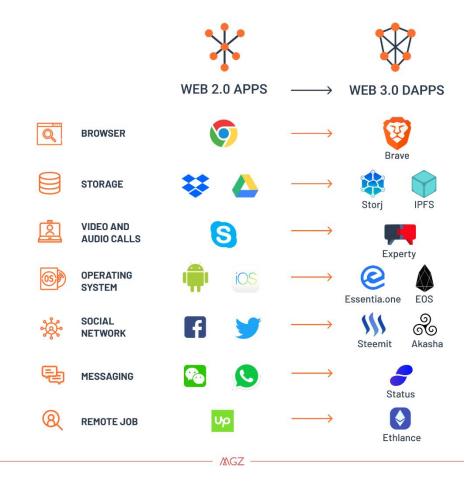
### Land title registration

AsPublicly-accessible ledgers, blockchains can make all kinds of record-keeping more efficient. Property titles are a case in point. They tend to be susceptible to fraud, as well as costly and labour intensive to administer.



When executed peer-to-peer, trade confirmations become almost instantaneous. This means intermediaries — such as the clearing house, auditors and custodians — get removed from the process.





# 9.ACKNOWLEDGEMENT

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# 10.Conclusion

Blockchain technology is still a far reaching mystery to me. However, we've gotten a taste of what it means now and having struggled but triumphed over the initial understanding, By using this technology for the internet we can solve the problem of privacy or security over the internet. In the current version of internet personal information of public and privacy can be attacked which can be prevented in the new version of internet.

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