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AWARENESS, TRUST, AND ADOPTION OF BLOCKCHAIN TECHNOLOGY AND CRYPTOCURRENCY AMONG BLOCKCHAIN COMMUNITIES

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Abstract

Blockchain technology and cryptocurrency are attracting increasing attention from consumers, investors, investment industry and regulators. Cryptocurrency has great potential to be used for transaction or investment in the future. However, level of awareness of the blockchain technology and cryptocurrency is still at infant stage, specifically in developing countries. Thus, this study aims to investigate the level of awareness, trust and adoption of blockchain technology among blockchain community. Quantitative approach was adopted in this study where a new questionnaire was developed in the first phase to measure the level of awareness, adoption, and trust of blockchain technology applications among blockchain communities. The resulting questionnaire consists of items on respondents' demographic, their awareness, trust, and adoption of FinTech particularly on blockchain technology and cryptocurrency. In the second phase, a pilot study was conducted to validated the new questionnaire from 304 respondents. Nevertheless, the majority of respondents are confident and trust that the blockchain technology can offer a stable and secure platform, which gives positive impact on the application of the technology. Empirical results provide significant insights into the development of the blockchain technology industry in the country.

Keywords: *Blockchain Communities, Cryptocurrency, Technology Adoption, Awareness, Trust, Bitcoin*

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1. Introduction

Blockchain is a shared, immutable ledger that facilitates the process of recording transactions and tracking assets in a business network. An asset can be tangible (a house, car, cash, land) or intangible (intellectual property, patents, copyrights, branding). Virtually anything of value can be tracked and traded on a blockchain network, reducing risk and cutting costs for all involved.

A cryptocurrency is a digital or virtual currency that is secured by cryptography, which makes it nearly impossible to counterfeit or double-spend. Many cryptocurrencies are decentralized networks based on blockchain technology a distributed ledger enforced by a disparate network of computers. A defining feature of cryptocurrencies is that they are generally not issued by any central authority, rendering them theoretically immune to government interference or manipulation.

Blockchain technology has the potential to disrupt digital interaction in our economy and society. The technology's rapid and dynamic technical development is driven by start-ups and incumbents alike, creating a myriad of applications across economic and societal domains. However, the implications of this potential new technological paradigm have not yet reached wider public debate, nor have economic and societal implications been adequately explored. Distributed ledger technologies and blockchains stem from an ideological open-source movement and facilitate the exchange of assets via a complementary technical layer on top of the internet [1]. Current platform-based business structures like Facebook, Uber, Airbnb or Amazon could be replaced by evolving decentralized ecosystems. At the same time, community-owned neutral networks could facilitate a re-empowerment of individuals including but not limited to the sovereignty over one's data. It is likely that blockchain technology will eventually affect everyone in our society. In this book the key concepts of blockchain technology and an overview of the machinations of different blockchain ecosystems are presented. The socio-economic impact of this new technology is discussed including its impact on sectors such as energy, data, capital markets, logistics, and gambling. Challenges of adoption and roll out will be discussed with a specific focus on scalability and regulation. Non-technical and accessible, the book seeks to demystify the functionalities of blockchains, their potential as well as their likely socio-economic impacts.

The continued evolution of cryptocurrencies and the underlying exchanges on which they trade has generated tremendous urgency to develop our understanding of a product that has been identified as a potential enhancement of and replacement for traditional cash as we know it. The market efficiency of Bitcoin and found through a battery of tests that Bitcoin was inefficient, although it was becoming less inefficient over time [2]. Much research continues to identify this asset class to contain exceptionally high levels of volatility when compared to more established counterparts. However, cryptocurrencies as a new asset class are not without its substantial issues, particularly that of the provision of a platform for criminality and, indeed, major cybercriminal events. While much debate surrounds the process in which this product can be

regulated, there exists a wide variety of channels in which criminality can develop and thrive [3]. Regulatory bodies and policy-makers alike have observed the growth of cryptocurrencies with a certain amount of scepticism, based on this growing potential for illegality and malpractice.

While Bitcoin was the first operational public cryptocurrency, it is not the only type, and there certainly are many variations of cryptocurrencies [4]. We can identify at least four types of cryptocurrencies depending on how they are formulated or code design, application or use case, and other factors.

You might get coins, payment tokens or altcoins, security tokens, non-fungible tokens or NFTs, decentralized finance tokens, utility tokens, and other categories.

This tutorial teaches about the different types of cryptocurrency and tokens. We also include information like how cryptocurrencies are differentiated, ways they are utilized, and rich examples of the different types [5].

Although the term cryptocurrencies are used to define all the different types of cryptocurrency or digital currencies, it is commonly interchanged with coins [6]. They are commonly regarded so despite many of them not serving as a unit of account, store of value, and a medium of exchange, although Bitcoin does.

However, coins can be differentiated from altcoins. The term altcoins are also a common reference to cryptocurrencies of all types apart from Bitcoin.

Bitcoin is the most popular and valuable cryptocurrency. An anonymous person called Satoshi Nakamoto invented it and introduced it to the world via a white paper in 2008. There are thousands of cryptocurrencies present in the market today.

Each cryptocurrency claims to have a different function and specification. For example, Ethereum's ether markets itself as gas for the underlying smart contract platform. Ripple's XRP is used by banks to facilitate transfers between different geographies [7].

Bitcoin, which was made available to the public in 2009, remains the most widely traded and covered cryptocurrency. As of May 2022, there were over 19 million bitcoins in circulation with a total market cap of around $576 billion. Only 21 million bitcoins will ever exist [8].

2. Cryptocurrencies awareness

Fiat currencies derive their authority as mediums of transaction from the government or monetary authorities. For example, each dollar bill is backstopped by the Federal Reserve [9].

But cryptocurrencies are not backed by any public or private entities. Therefore, it has been difficult to make a case for their legal status in different financial jurisdictions throughout the world. It doesn't help matters those cryptocurrencies have largely functioned outside most existing financial infrastructure. The legal status of cryptocurrencies has implications for their use in daily transactions and trading. In June 2019, the Financial Action Task Force (FATF) recommended that wire transfers of cryptocurrencies should be subject to the requirements of its Travel Rule, which requires AML compliance. [10]

As of December 2021, El Salvador was the only country in the world to allow Bitcoin as legal tender for monetary transactions. In the rest of the world, cryptocurrency regulation varies by jurisdiction.

Japan's Payment Services Act defines Bitcoin as legal property. Cryptocurrency exchanges operating in the country are subject to collect information about the customer and details relating to the wire transfer. China has banned cryptocurrency exchanges and mining within its borders. India was reported to be formulating a framework for cryptocurrencies in December [11].

Cryptocurrencies are legal in the European Union. Derivatives and other products that use cryptocurrencies will need to qualify as "financial instruments." In June 2021, the European Commission released the Markets in Crypto-Assets (MiCA) regulation that sets safeguards for regulation and establishes rules for companies or vendors providing financial services using cryptocurrencies [12]. Within the United States, the biggest and most sophisticated financial market in the world, crypto derivatives such as Bitcoin futures are available on the Chicago Mercantile Exchange. The Securities and Exchange Commission (SEC) has said that Bitcoin and Ethereum are not securities [13].

- **Advantages of Cryptocurrency [14]**
    - Cryptocurrencies represent a new, decentralized paradigm for money. In this system, centralized intermediaries, such as banks and monetary institutions, are not necessary to enforce trust and police transactions between two parties. Thus, a system with cryptocurrencies eliminates the possibility of a single point of failure, such as a large bank, setting off a cascade of crises around the world, such as the one that was triggered in 2008 by the failure of institutions in the United States.
    - Cryptocurrencies promise to make it easier to transfer funds directly between two parties, without the need for a trusted third party like a bank or a credit card company. Such decentralized transfers are secured by the use of public keys and private keys and different forms of incentive systems, such as proof of work or proof of stake.

- Because they do not use third-party intermediaries, cryptocurrency transfers between two transacting parties are faster as compared to standard money transfers. Flash loans in decentralized finance are a good example of such decentralized transfers. These loans, which are processed without backing collateral, can be executed within seconds and are used in trading.
- Cryptocurrency investments can generate profits. Cryptocurrency markets have skyrocketed in value over the past decade, at one point reaching almost $2 trillion. As of May 2022, Bitcoin was valued at more than $550 billion in crypto markets.
- The remittance economy is testing one of cryptocurrency's most prominent use cases. Currently, cryptocurrencies such as Bitcoin serve as intermediate currencies to streamline money transfers across borders. Thus, a fiat currency is converted to Bitcoin (or another cryptocurrency), transferred across borders and, subsequently, converted to the destination fiat currency. This method streamlines the money transfer process and makes it cheaper.

- **Disadvantages of Cryptocurrency [15]**
  - Though they claim to be an anonymous form of transaction, cryptocurrencies are actually pseudonymous. They leave a digital trail that agencies such as the Federal Bureau of Investigation (FBI) can decipher. This opens up possibilities of governments or federal authorities tracking the financial transactions of ordinary citizens.
  - Cryptocurrencies have become a popular tool with criminals for nefarious activities such as money laundering and illicit purchases. The case of Dread Pirate Roberts, who ran a marketplace to sell drugs on the dark web, is already well known. Cryptocurrencies have also become a favourite of hackers who use them for ransomware activities.
  - In theory, cryptocurrencies are meant to be decentralized, their wealth distributed between many parties on a blockchain. In reality, ownership is highly concentrated. For example, an MIT study found that just 11,000 investors held roughly 45% of Bitcoin's surging value.
  - One of the conceits of cryptocurrencies is that anyone can mine them using a computer with an Internet connection. However, mining popular cryptocurrencies requires considerable energy, sometimes as much energy as entire countries consume. The expensive energy costs coupled with the unpredictability of mining have concentrated mining among large firms whose revenues running into the billions of dollars. According to an MIT study, 10% of miners account for 90% of its mining capacity.

- Though cryptocurrency blockchains are highly secure, other crypto repositories, such as exchanges and wallets, can be hacked. Many cryptocurrency exchanges and wallets have been hacked over the years, sometimes resulting in millions of dollars' worth of "coins" stolen.
- Cryptocurrencies traded in public markets suffer from price volatility. Bitcoin has experienced rapid surges and crashes in its value, climbing to as high as $17,738 in December 2017 before dropping to $7,575 in the following months. Some economists thus consider cryptocurrencies to be a short-lived fad or speculative bubble.

Cryptocurrencies are a new paradigm for money. Their promise is to streamline existing financial architecture to make it faster and cheaper. Their technology and architecture decentralize existing monetary systems and make it possible for transacting parties to exchange value and money independently of intermediary institutions such as banks.

Cryptocurrencies are generated by mining. For example, Bitcoin is generated using Bitcoin mining. The process involves downloading software that contains a partial or full history of transactions that have occurred in its network. Though anyone with a computer and an Internet connection can mine cryptocurrency, the energy- and resource-intensive nature of mining means that large firms dominate the industry [16].

Bitcoin is by far the most popular cryptocurrency followed by other cryptocurrencies such as Ethereum, Binance Coin, Solana, and Cardano [17]. The SEC has said that Bitcoin and Ethereum, the top two cryptocurrencies by market cap, are not securities. It has not commented on the status of other cryptocurrencies.

3. The blockchain awareness

Blockchain is a shared, immutable ledger that facilitates the process of recording transactions and tracking assets in a business network. An asset can be tangible (a house, car, cash, land) or intangible (intellectual property, patents, copyrights, branding) [18]. Virtually anything of value can be tracked and traded on a blockchain network, reducing risk and cutting costs for all involved.

- **The importance of Blockchain**

Business runs on information. The faster it's received and the more accurate it is, the better. Blockchain is ideal for delivering that information because it provides immediate, shared and completely transparent information stored on an immutable ledger that can be accessed only by permissioned network members [19]. A blockchain network can track orders, payments, accounts, production and much more. And because members share a single view of the truth, you can see all details of a transaction end to end, giving you greater confidence, as well as new efficiencies and opportunities.

- **The key elements of a blockchain**

Distributed ledger technology: All network participants have access to the distributed ledger and its immutable record of transactions. With this shared ledger, transactions are recorded only once, eliminating the duplication of effort that's typical of traditional business networks [20].

Immutable records: No participant can change or tamper with a transaction after it's been recorded to the shared ledger. If a transaction record includes an error, a new transaction must be added to reverse the error, and both transactions are then visible.

Smart contracts: To speed transactions, a set of rules called a smart contract is stored on the blockchain and executed automatically [21]. A smart contract can define conditions for corporate bond transfers, include terms for travel insurance to be paid and much more.

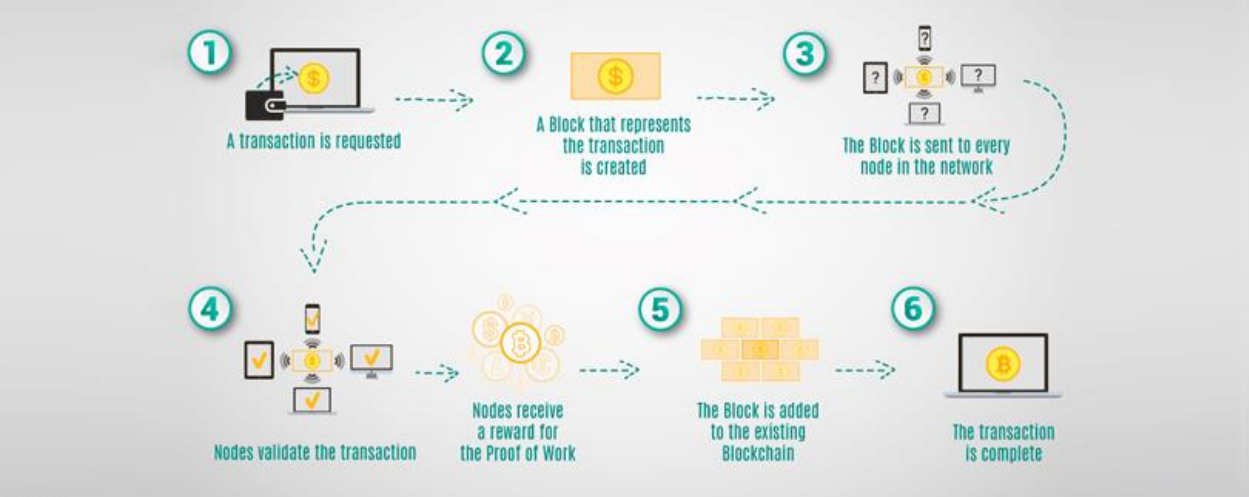
- **How blockchain works**

As each transaction occurs, it is recorded as a "block" of data: Those transactions show the movement of an asset that can be tangible (a product) or intangible (intellectual). The data block can record the information of your choice: who, what, when, where, how much and even the condition, such as the temperature of a food shipment, see Figure 1 [22].

Each block is connected to the ones before and after it: These blocks form a chain of data as an asset moves from place to place or ownership changes hands. The blocks confirm the exact time and sequence of transactions, and the blocks link securely together to prevent any block from being altered or a block being inserted between two existing blocks [23].

Transactions are blocked together in an irreversible chain: a blockchain: Each additional block strengthens the verification of the previous block and hence the entire blockchain. This renders the blockchain tamper-evident, delivering the key strength of immutability [24]. This removes the possibility of tampering by a malicious actor and builds a ledger of transactions you and other network members can trust.

Figure 1
How the Blockchain Works



- **Benefits of blockchain**

What needs to change: Operations often waste effort on duplicate record keeping and third-party validations. Record-keeping systems can be vulnerable to fraud and cyberattacks. Limited transparency can slow data verification. And with the arrival of IoT, transaction volumes have exploded. All of this slows business, drains the bottom line and means we need a better way. Enter blockchain [25], [26].

Greater trust: With blockchain, as a member of a members-only network, you can rest assured that you are receiving accurate and timely data, and that your confidential blockchain records will be shared only with network members to whom you have specifically granted access.

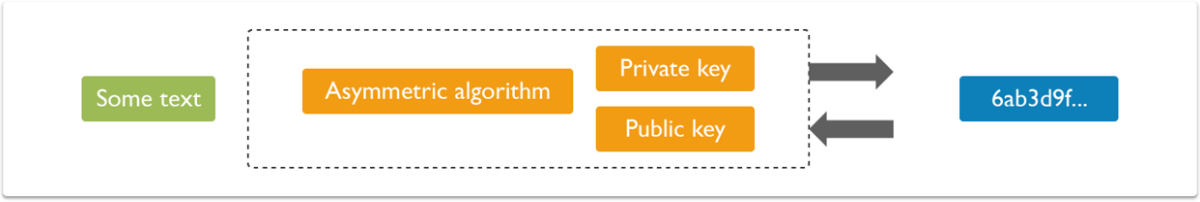
Greater security: Consensus on data accuracy is required from all network members, and all validated transactions are immutable because they are recorded permanently. No one, not even a system administrator, can delete a transaction.

More efficiencies: With a distributed ledger that is shared among members of a network, time-wasting record reconciliations are eliminated. And to speed transactions, a set of rules called a smart contract can be stored on the blockchain and executed automatically.

- **Role of Blockchain**

Data security always matters. Encryption is basically an approach that helps organizations to keep their data secure, see Figure 2 [27].

Figure 2
Role of Blockchain

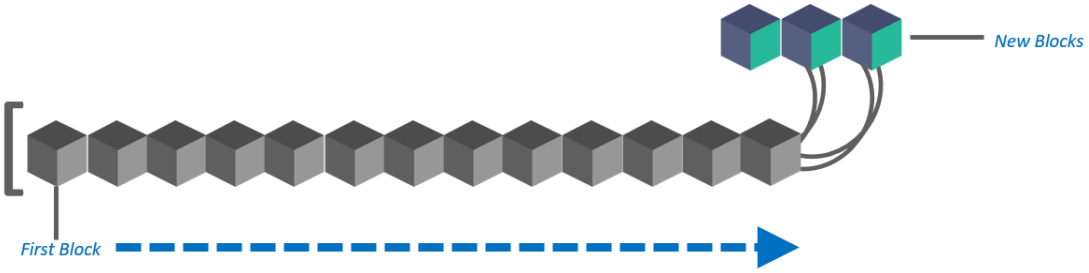


The encrypted data is encoded or changed up to some extent before it is sent out of a network by the sender and only authorized parties can access that information [28]. In Blockchain, this approach is useful because it simply adds more to the overall security and authenticity of blocks and helps to keep them secure.

- **The meaning of blocks in blockchain technology**

Blockchain consists of a list of records. Such records are stored in blocks. These blocks are in turn linked with other blocks and hence constitute a chain called Blockchain, see Figure 3 [29].

Figure 3
Blocks in Blockchain Technology

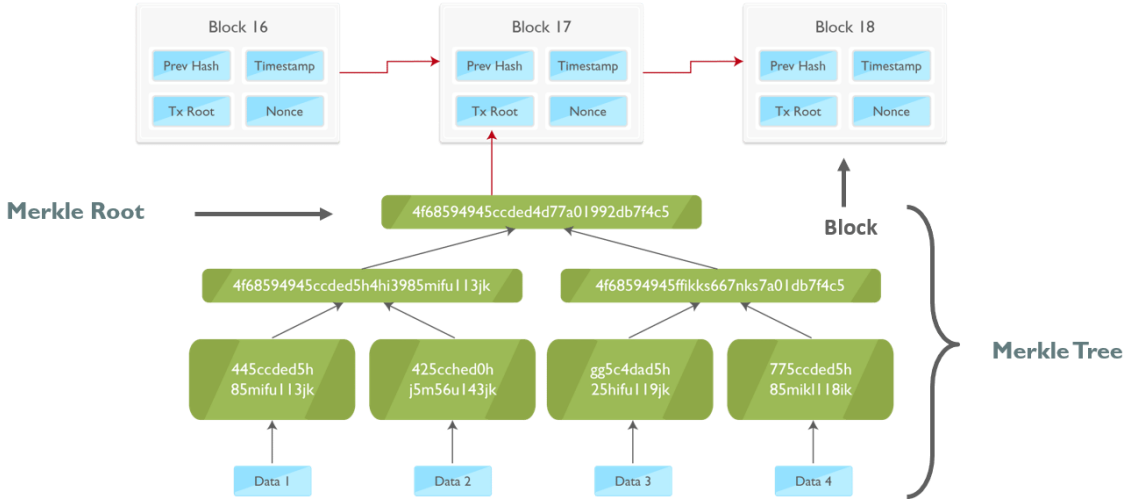


Every block in this online ledger basically consists of a hash pointer which acts as a link to the block which is prior to it, transaction data and in fact a stamp of time [30]. In case any modification is required, the organization simply has to erase the information from all other blocks too. It is because of no other reason than this, data must be given the extreme care of while using this approach.

- **Important are Merkle trees in Blockchains**

Merkle Tree also known as ‘hash tree’ is a data structure in cryptography in which each leaf node is a hash of a block of data, and each non-leaf node is a hash of its child nodes, see Figure 4 [31].

Figure 4
Merkle trees in Blockchains

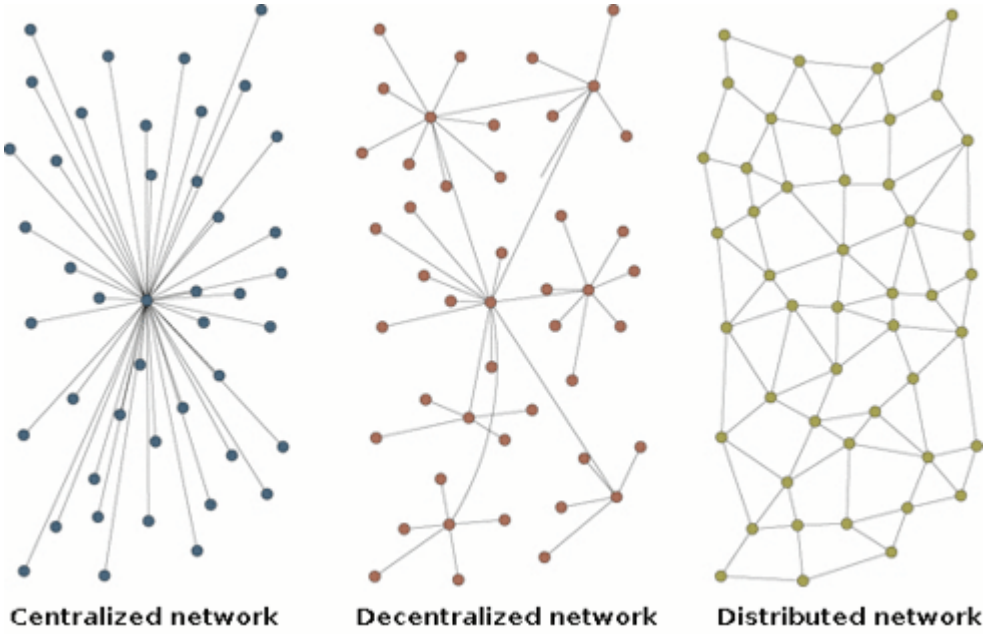


Also, if someone needs to verify the existence of a specific transaction in a block, then he doesn't have to download the entire block. Downloading a set of a branch of this tree which contains this transaction is enough [32]. We check the hashes which are just going up the branch (relevant to my transaction). If these hashes check out good, then we know that this particular transaction exist in this block.

- **Blockchain an incorruptible ledger**

Blockchain is considered incorruptible. Any ill-intentioned individual acting alone is powerless. "To take over the network, an attacker would have to control more than 50 percent of its total computing power," Augier explains. "We hope that's a theoretical scenario, but we can't be sure [33]. Should it happen, the individual would take every precaution to avoid being noticed." Not to mention the energy required to power the computers needed for the blockchain system to work. As illustrate in Figure 5 [34].

Figure 5
Blockchain an incorruptible ledger



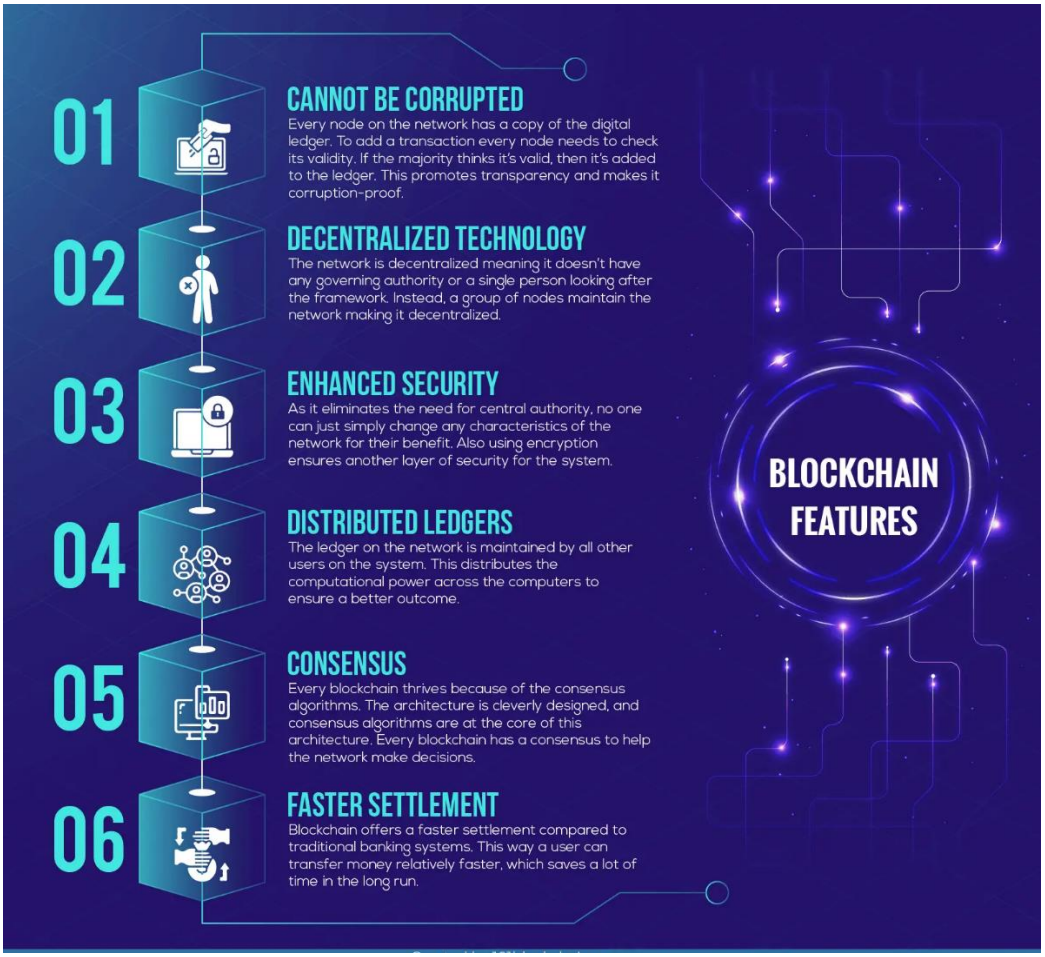
The first and in fact the prime difference is Blockchain is a digital ledger that can be decentralized very easily. The chances of error in this approach are far less than that in an ordinary ledger [35]. An ordinary ledger is what that is prepared by hands or by human efforts while the Blockchain performs all its tasks automatically. You just need to configure it in a proper manner and by following all the guidelines.

4. Blockchain features (trust and security issues)

Blockchain technology isn't just a backup network for cryptocurrencies, but it offers a lot more. So, what are the key blockchain features that makes it so irresistible? Why is it gaining so much popularity? Let's dive in a little deeper into the features of blockchain in this guide to answer these questions. Let's start with the quick Blockchain infographic! see Figure 6 [36].

Figure 6

The Blockchain Key Features



1. Immutability

There are some exciting blockchain features but among them "Immutability" is undoubtedly one of the key features of blockchain technology. But why is this technology uncorrupted? Let's start with a connecting blockchain with immutability.

Immutability means something that can't be changed or altered. This is one of the top blockchain features that help to ensure that the technology will remain as it is – a permanent, unalterable network. But how does it maintain that way?

Blockchain technology works slightly different than the typical banking system. Instead of relying on centralized authorities, it ensures the blockchain features through a collection of nodes [37]. Every node on the system has a copy of the digital ledger. To add a transaction every node needs to check its validity. If the majority thinks it's valid, then it's added to the ledger. This promotes transparency and makes it corruption-proof. So, without the consent from the majority of nodes, no one can add any transaction blocks to the ledger.

Another fact, that backs up the list of key blockchain features is that, once the transaction blocks get added on the ledger, no one can just go back and change it. Thus, any user on the network won't be able to edit, delete or update it.

We know how every year there's a massive amount of money that gets hacked through our regular channels. Many people spend Trillions of monies to protect their business from any external hacks. However, we always forget to count the internal cybersecurity risks that come from corrupted people and authorities.

In many cases, there's always an internal link for these hacks to know about all the security measures, so in the end, we pay the price for our trust. As you all know banks aren't that trustable now and the global economy needs a thrustless environment to fully overcome this issue [38]. So, when it comes to a corruption-free environment, you can easily assume that blockchain can definitely change a lot of these scenarios. If businesses start to integrate blockchain technology to maintain their internal networking system, no one would be able to hack into it or alter or even steal information.

Public blockchains are a perfect example of this. Everyone in the public blockchain can see the transactions, so it is super transparent. On the other hand, private or federated blockchain could be best for enterprises that want to remain transparent among staff and protect their sensitive information along the way from public view.

2. Decentralized

The network is decentralized meaning it doesn't have any governing authority or a single person looking after the framework. Rather a group of nodes maintains the network making it decentralized [39]. This is one of the key features of blockchain technology that works perfectly. Let me make it simpler. Blockchain puts us users in a straightforward position. As the system doesn't require any governing authority, we can directly access it from the web and store our assets there.

You can store anything starting from cryptocurrencies, important documents, contracts or other valuable digital assets. And with the help of blockchain, you'll have direct control over them using your private key. So, you see the decentralized structure is giving the common people their power and rights back on their assets.

3. Enhanced Security

As it gets rid of the need for a central authority, no one can just simply change any characteristics of the network for their benefit. Using encryption ensures another layer of security for the system [40]. Every information on the blockchain is hashed cryptographically. In simple terms, the information on the network hides the true nature of the data. For this process, any input data gets through a mathematical algorithm that produces a different kind of value, but the length is always fixed.

All the blocks in the ledger come with a unique hash of its own and contain the hash of the previous block. So, changing or trying to tamper with the data will mean changing all the hash IDs. And that's kind of impossible.

4. Distributed Ledgers

Usually, a public ledger will provide every information about a transaction and the participant. It's all out in the open, nowhere to hide. Although the case for private or federated blockchain is a bit different. But still, in those cases, many people can see what really goes on in the ledger.

That's because the ledger on the network is maintained by all other users on the system. This distributed computational power across the computers to ensure a better outcome [41]. This is the reason it's considered one of the blockchain essential features. The result will always be a higher efficient ledger system that can take on the traditional ones.

5. Consensus

Every blockchain thrives because of the consensus algorithms. The architecture is cleverly designed, and consensus algorithms are at the core of this architecture. Every blockchain has a consensus to help the network make decisions.

In simple terms, the consensus is a decision-making process for the group of nodes active on the network. Here, the nodes can come to an agreement quickly and relatively faster. When millions of nodes are validating a transaction, a consensus is absolutely necessary for a system to run smoothly. You could think of it as kind of a voting system, where the majority wins, and the minority has to support it [42]. The consensus is responsible for the network being thrustless. Nodes might not trust each other, but they can trust the algorithms that run at the core of it. That's why every decision on the network is a winning scenario for the blockchain. It's one of the benefits of blockchain features.

There are lots of different consensus algorithms for blockchains over the globe. Each has its own unique way to make decisions and perfecting previously introduces mistakes. The architecture creates a realm of fairness on the web.

However, to keep the decentralization going every blockchain must have a consensus algorithm, or else the core value of it is lost.

6. Faster Settlement

Traditional banking systems are quite slow. Sometimes it can take days to process a transaction after finalizing all settlements. It also can be corrupted quite easily. Blockchain offers a faster settlement compared to traditional banking systems. This way a user can transfer money relatively faster, which saves a lot of time in the long run [43]. These blockchain features make life easier for foreign workers and help to understand Why Blockchain is Important. Many people travel to another country in

search of a better life and job and leave families behind. However, sending money to their families overseas takes a lot of time and could become fatal in times of need.

Now, blockchains are way too fast, and they can easily use it to send money to their loved ones. Another fun fact is the smart contract system. This can allow making faster settlements for any kind of contract. This is one of the best benefits of blockchain features to this day. And with the third party out of the way, people can send money with a minimal fee.

5. The blockchain trust™

The Blockchain Trust™ is built using the same basic concepts as the blockchain technology powering the crypto currencies such as Bitcoin and Ethereum. This includes "blocks" of information which can be used to assemble a unique trust designed for an individual client. Changes and amendments to that trust would be recorded in the "blockchain" and hence forever verifiable. Triggers may also be built into the blockchain which allow for the trust to alter its structure upon the occurrence of certain events [44]. This allows the Trust to be infinitely flexible and useful for circumstances and events which are yet unknowable.

For example, the Trust could convert into an Irrevocable Asset Protection Trust in the event of a lawsuit. Or it could become an Irrevocable Income Only Trust prior to a Beneficiary needing to apply for Medicaid. In effect, the Blockchain Trust™ may become any type of legal Trust which fits the needs of the Beneficiaries.

An additional advantage of the Blockchain Trust™ is that since it is built within a proprietary network the contents of the Trust remain completely private. All Blockchain Trusts are also updated with the most current state and federal laws and maintained within the system so they are always compliant. There is no longer need to have your trust updated every 5 years.

The entire platform is also completely digital. Users will have access to the information contained in your trust via a secure login. Additionally, Trustees, Protectors, and Beneficiaries may also access relevant details and necessary documents and information for them to execute their duties all within the platform.

Should a Trust ever be challenged, the security of the blockchain will reveal every amendment, change, directive, and even every access ever made which will include the date, time and who made the change or accessed the document, all within the 'block'.

The real power of the Blockchain Trust™ comes with the asset registration feature. Users have the power to record every asset transfer to the trust within the blockchain itself. This means at death, a successor trustee will not only have immediate access to the trust itself, but will have a full and current accounting of all the assets of the Trust.

The Blockchain Trust™ combines the legal requirements of preparing and managing your estate with cutting edge technology which makes doing so infinitely more simple than traditional estate planning.

The Blockchain Trust™ also creates a platform which is much easier for estate planning attorneys to manage their clients plans. The platform allows for attorneys to create a master platform in which they can customize their clients trust and manage them over the years. No more printed updates and in person client signings. Changes are all managed through the Blockchain Trust™ system. Any updates and changes are done electronically and verified via the Blockchain Trust™ protocol. Users would pay an initiation fee to set up their Blockchain Trust™ as well as a continuing annual fee. Payments of the fee would also be managed via the Blockchain Trust™ platform. This includes updating of payment information and suspension of the blockchain validation if the fees are not current.

In the event a client wishes to suspend the use of the Blockchain Trust™ platform they would have access to print or download a full copy of their Trust and all relevant blocks within the chain; however, they would not be allowed to create new blocks or otherwise maintain or amend the planning. They would in effect, have "read-only" access unless they choose to become current on fees in the future, which would restore full access.

Due to the robust nature of the Blockchain Trust™ platform, users can utilize it to create blocks which contain related information. This might include banking information or instruction sets which would traditionally be excluded from their estate planning portfolio.

Additionally, services which would be useful to users can be offered within the Blockchain Trust™ platform. This could range from transfer services for real property, to insurance to tax planning to investment options. The system is 'smart' and will notify the user when a particular tax strategy may be applicable, or when the use of insurance would be advisable.

Of course, access to blockchain based cryptocurrencies like Bitcoin would be directly built into the system. The majority of users would use the platform to simply store their coins, but the capacity to convert assets into cryptocurrency would also be particularly useful for asset protection purposes.

In the event the Blockchain Trust™ asset protection features are triggered, the control element would be transferred and if the consensus of the control chain deems, the assets could be converted fully into cryptocurrency. This would facilitate the securing of the assets in the event a beneficiary was subjected to a judicial system judgement.

The Blockchain Trust™ is a revolutionary platform that is simpler to use, more secure than existing systems and designed to take advantage of the inevitable changes in both

law and technology. There is simply nothing like it in existence today and the Blockchain Trust™ represents the future of estate, tax and asset protection planning.

6. Types of blockchain networks - communities preceptive

There are several ways to build a blockchain network. They can be public, private, permissioned or built by a consortium [45].

- **Public blockchain networks**

A public blockchain is one that anyone can join and participate in, such as Bitcoin. Drawbacks might include substantial computational power required, little or no privacy for transactions, and weak security. These are important considerations for enterprise use cases of blockchain.

- **Private blockchain networks**

A private blockchain network, similar to a public blockchain network, is a decentralized peer-to-peer network. However, one organization governs the network, controlling who is allowed to participate, execute a consensus protocol and maintain the shared ledger. Depending on the use case, this can significantly boost trust and confidence between participants. A private blockchain can be run behind a corporate firewall and even be hosted on premises.

- **Permissioned blockchain networks**

Businesses who set up a private blockchain will generally set up a permissioned blockchain network. It is important to note that public blockchain networks can also be permissioned. This places restrictions on who is allowed to participate in the network and in what transactions. Participants need to obtain an invitation or permission to join.

- **Consortium blockchains**

Multiple organizations can share the responsibilities of maintaining a blockchain. These pre-selected organizations determine who may submit transactions or access the data. A consortium blockchain is ideal for business when all participants need to be permissioned and have a shared responsibility for the blockchain.

8. Conclusion

Blockchain technology and cryptocurrency have already had an impact on individuals and organizations. Involvement in this does not depend on education level, age, or industry sector. Up to 2022, the level of knowledge on blockchain and related technologies reached the intermediate level but there are also a small number of experts. The blockchain community adopts the technology in various ways such as use for Peer-to-Peer payment. Besides Bitcoin, the blockchain community is familiar with Ethereum. Many purchased more than one form of cryptocurrency in which the main

reason for their participating is due to investment as they have trust in the long-term vision and value of the tokens they purchased. However, the growth of the technologies could be hindered by government regulation. To date, the community has not issued any guidelines on blockchain or cryptocurrency, leading the community, especially financial institutions, to face various challenges in adopting the technologies. Future works could focus on awareness research for other than blockchain communities, and the application development of blockchain technology. Blockchain technology isn't just another hype that people forget after a few days. With all its blockchain features and applications, we can safely assume that it's here to stay. All the blockchain important features are making a whole another level of impact on the web. It's infused with all sorts of new techs. Although blockchain is giving rise to a lot of controversies, still if people can utilize the ideology behind all benefits of blockchain they can make a brighter and shinier future for everyone. Not to mention, Blockchain can change the world.

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