



Digital Currency

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Abstract. Digital Currency as a broad term can contain anything that represents value in a digital manner. Digital Currency can contain firstly what we would call electronic ‘money’, money that is simply a digital representation of government issued fiat currency. Fiat currency is government backed, so whilst it has no intrinsic value. Digital currency can also cover virtual currency – electronic currency that it is not considered legal tender. Virtual currencies are controlled and created by their developers, with value being appreciated in a specific community. A Crypto currency is a digital or virtual currency, which secured by cryptography that makes it impossible to double-spend on a distributed network. These paper overviews about the Digital Currency and its impact in current financial market.

Keywords: Fiat, intrinsic, cryptography

1. Introduction

Digital Currency is a form of currency that is available only in digital or electronic form. It is also called digital money, electronic money, electronic currency, or cyber cash. A currency is meant to buy goods and services. But unlike normal currencies, digital currency is only available in digital form. Digital currencies do not require intermediaries and are often the cheapest method for trading currencies. It’s a currency, which could be used for peer-to-peer transactions without having to trust a third party like a central bank

2. Characteristics

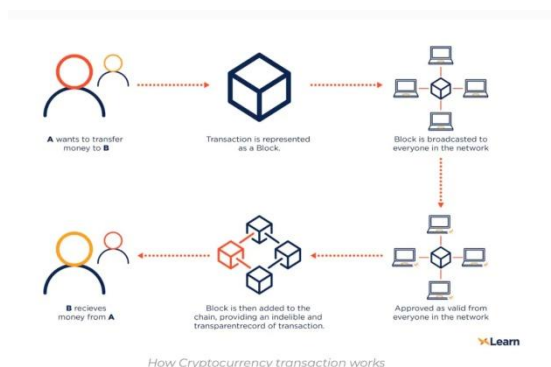
- Digital currencies only exist in digital form. They do not have a physical equivalent.
- Digital currencies can be centralized or decentralized. Fiat currency which exists in physical form, is a centralized system of production and distribution by a central bank and government agencies. Prominent cryptocurrencies, such as Bitcoin and Ethereum are examples of decentralized digital currency systems.
- Typical digital currencies do not require intermediaries and are often the cheapest method for trading currencies.
- Because of the globally recognized value of digital currency, time spent determining the price of transaction and assessing fees connected to exchanging money from one form to another is greatly reduced. Transactions become simpler and faster.
- Digital currency transactions involving Bitcoin are recorded on a networked public database called blockchain. Because companies that convert Bitcoin to actual dollars require identification, its difficult for hackers to steal and use.

3. Types Of Digital Currency

Cryptocurrency- Digital Currency with actual value in the real world. Cryptocurrency is a digital asset designed as a medium of exchange that uses strong cryptography to secure financial transactions, control the process of creating additional units, and verify asset transfers.

Examples: Bitcoin, Ethereum, Dogecoin, USD Coin, etc.

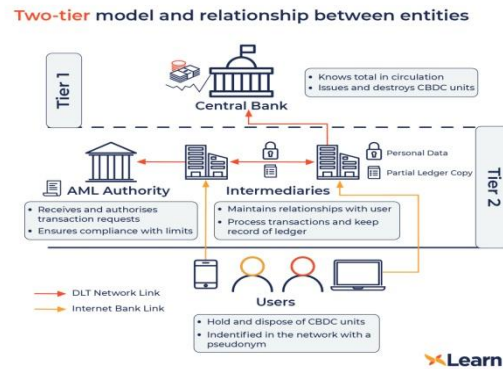
4. Transaction in Cryptocurrency



Blockchain - Blockchain is a technology on which cryptocurrency works. A blockchain is a decentralized ledger of all transactions across a peer-peer network. When a bitcoin is exchanged, a block of data is created and shared across all the computers attached to the network. Think of this block as a series of such transactions. Once this block is verified, a formal record gets entered into the decentralized database for everyone to see. Then, when the same cryptocurrency is sought to be sold again, another block gets created. The previous transaction is not erased. The new block gets attached to the old block to form a chain for everyone to see the trail (transaction cannot be reversed).

CBDC – The term CBDC stands for ‘Central Bank Digital Currency’. Central Bank Digital Currency is the digital form of a country's fiat currency that is also a claim on the central bank. In layman's terms, a CBDC is simply a digital fiat, whereas cryptocurrencies are digital assets on a decentralized network. Many countries are developing CBDCs, and some have even implemented them. Because so many countries are researching ways to transition to digital currencies. A CBDC is issued and regulated by a nation's monetary authority or central bank.

Examples - Some of the countries that have established CBDC are The Bahamas, Nigeria, Grenada, St. Vincent & The Grenadines, Saint Lucis, Monserrat, St. Kitts & Nevis, Antigua and Barbuda, etc.



5. Advantages Of Digital Currency

Easy Transactions – Digital transactions can be made easily, generally at a low cost, and in a relatively private manner. Using a smartphone app almost anyone can send and receive a variety of digital currencies.

Relatively Secure – Because many of the digital currencies are rooted in cryptography and blockchain security, decentralized cryptocurrencies tend to make for secure forms of payment. As such, the relative security of cryptos may be one of the biggest benefits for users. Crypto security, in large part, is determined by hash rate. Bitcoin is considered to be the most secure cryptocurrency, as it tends to have higher hash rate than other networks.

Efficient Government Payments – If the government developed a CBDC, it could send payments like tax refunds, child benefits and foot stamps to people instantly, rather than trying to mail them a cheque or figure out prepaid debit cards.

24/7 ACCESS – Existing money transfers often take more time during weekends and outside normal business hours because banks are closed and can't confirm transactions. With digital currency, transactions work at the same speed 24 hours a day, seven days a week.

Cheaper International Transfers – International currency transactions are very expensive. Individuals are charged high fees to move funds from one country to another, especially when it involves currency conversions. Digital assets could disrupt this market by making it faster and less expensive

6. Disadvantages Of Digital Currency

Steep Learning Curve – Digital currencies require work on the part of the user to learn how to perform fundamental tasks, like how to open a digital wallet and properly store digital assets securely. The system needs to get simpler for digital currencies to be more widely adopted.

Volatile In Value – Cryptocurrencies prices and values can change suddenly. Jim Cunha believes this is why businesses are reluctant to use it as a medium of exchange. “As a business, do I want to accept something volatile? What if I hold a bitcoin for a week and it loses 20% of its value?” With CBDC, though, the value is much stable, like a paper currency, and cannot fluctuate like this.

Lack Of Proper Regulation – When Warren Buffer emphasized the drawbacks of crypto, the experienced investor stressed on the lack of any regulatory authority controlling assets in this market. Due to the apparent lack of any supervisory management, the system is bound to “implode”, to quote the word that Buffet used. You may perfect the inherent technology, but unless a regulatory entity does not adopt cryptocurrency, there will always stand to be risk looming large.

Crypto Exchange Security – Cryptocurrency relies heavily on digital technology. As a result of this, it is open to breaches in cybersecurity. Among some worries over dealing with any crypto exchange is the fact that accounts can be hacked into.

There is already living proof of this with reports of hacking into many ICOs, costing individuals millions of dollars. The security infrastructure, thus, has to be controlled and managed better than it currently is.

7. Conclusion

Digital currencies are integral part of fintech revolution which will impact many areas including payment & settlement system and services. Though this concept of digital currency is less persistent now, it will emerge and disrupt the existing processes and systems. Since inception India's stance on crypto currencies hasn't been encouraging. Though RBI is apprehensive about crypto but it has no doubt in the utilization of distributed ledger technology in payment and settlement solutions and the power of Machine learning and Artificial intelligence.

Future Enhancement: The drawbacks can be reformed in the future to overcome the difficulties already processed in existing structure. The implementation of digital currency in the future would make all the transaction make easier. At last, new steps and procedures are encouraged to move to the next step in normalizing digital currency.

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