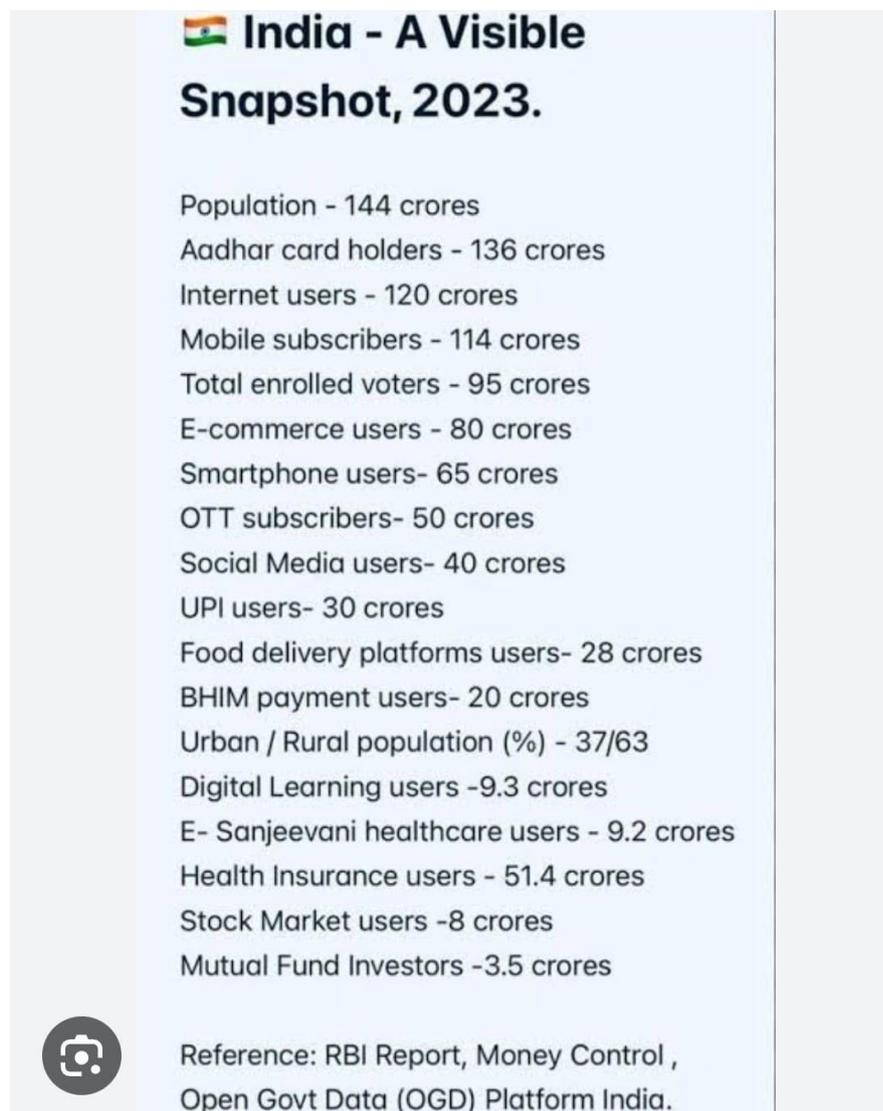


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Block chain Technology - Enabled Secure Mobile Financial Transactions

Block chain can streamline banking and lending services, reducing counterparty risk, and decreasing issuance and settlement times. It allows: Authenticated documentation and KYC/AML data, reducing operational risks and enabling real-time verification of financial documents.



Block Chain Technology.

Hereby invite your attention towards Block chain Technology, which will be the core aspect Information Technology and the world in the coming decades.

Block chain technology is a digital ledger of transactions that is distributed across a network of computers. Each transaction is recorded as a block and added to a chain of previous blocks, hence the name "Block chain."

One of the key features of Block chain technology is its decentralized nature, meaning that it does not rely on a central authority or intermediary to verify and process transactions. Instead, all participants in the network have a copy of the ledger and work together to validate transactions.

This makes Block chain technology particularly useful for applications that require transparency, security, and trust, such as financial transactions, supply chain management, and digital identity verification. The technology has gained popularity with the rise of cryptocurrencies like Bitcoin, which use Block chain technology to record and verify transactions.

A block chain is an online database that stores information chronologically and in consecutive blocks. Block chain Technology Operation system include.

- All information is recorded in a block.
- Once the block is full it is chained to the rest of the block in database.

- An empty block is added to the end of the chain to record new information.
- When a transaction is requested, a block representing the transaction is created.
- That block is sent to every node in the network.
- Nodes validate the transaction and receive a reward for proof of work.
- The network of nodes uses known algorithms to validate the transactions and users status.
- Then the block is added to the existing Block chain and the transaction is complete.

Features are:

- Decentralized system.
- Distributed: All network participants have a copy of ledger for complete transparency.
- Provides Digital Ledger.
- Enhanced Security.
- Avoid third party operations.
- Faster settlement.
- Always Auditable.
- Transparent & Provable.
- All transactions are time stamped.
- Uses Smart contracts & Public key Cryptography.
- A Block chain is programmable.
- Immutable: Any validated records are irreversible and cannot be changed.
- Anonymous: The identity of the participants is either anonymous or pseudonymous.

Why Block chain Technology is important? :

- Business runs on information. The faster it's received and the more accurate it is, the better.
- Block chain 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 authorized network members.
- A Block chain 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.

What is the difference between a database and a Block chain?

- Block chain is a special type of database management system that has more features than a regular database
- Block chain decentralize control without damaging trust in the existing data. This is not possible in other database systems.
- Companies involved in a transaction cannot share their entire database. But in Block chain networks, each company has its copy of the ledger, and the system automatically maintains consistency between the two ledgers.
- Although in most database systems you can edit or delete data, in b Block chain you can only insert data.

In the coming decades this Block chain technology by integrating AI & IOT ,will be well utilized in Banking, Insurance, Supply chain, Retail, Finance sector, Entertainment, Sports, Real Estate, Energy, Health care, Automobile Industry, etc. meanwhile in all real world areas in an most effective manner. In India Ministry of Electronics & Information Technology has Centre of Excellence in Block chain Technology to promote the use of Block chain technologies, facilitate the rapid adaptation and on-boarding of block chain based solutions, foster stronger collaboration between the government, public and private sectors and cooperate to ensure that the latest technological standards are made available in a safe and trusted manner.