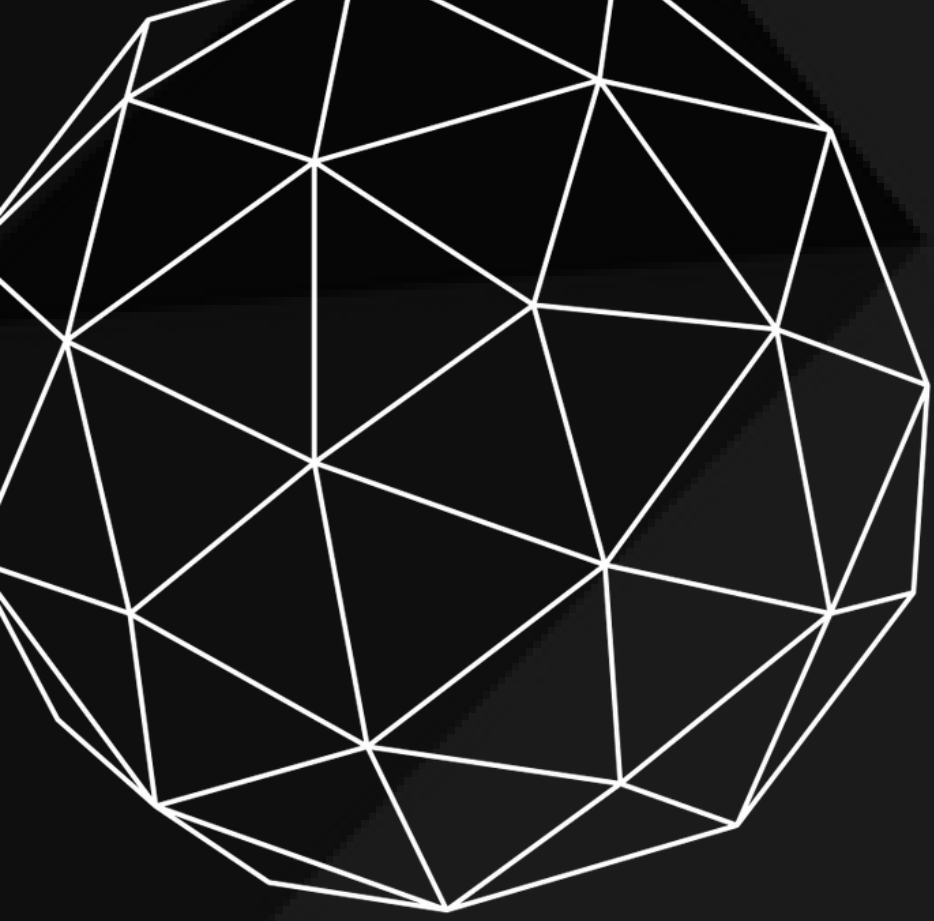


# Government Polytechnic Nashik

( An Autonomous Institute of Government of Maharashtra State )





Government Polytechnic Nashik  
शासक य तं नकेतन, ना शक

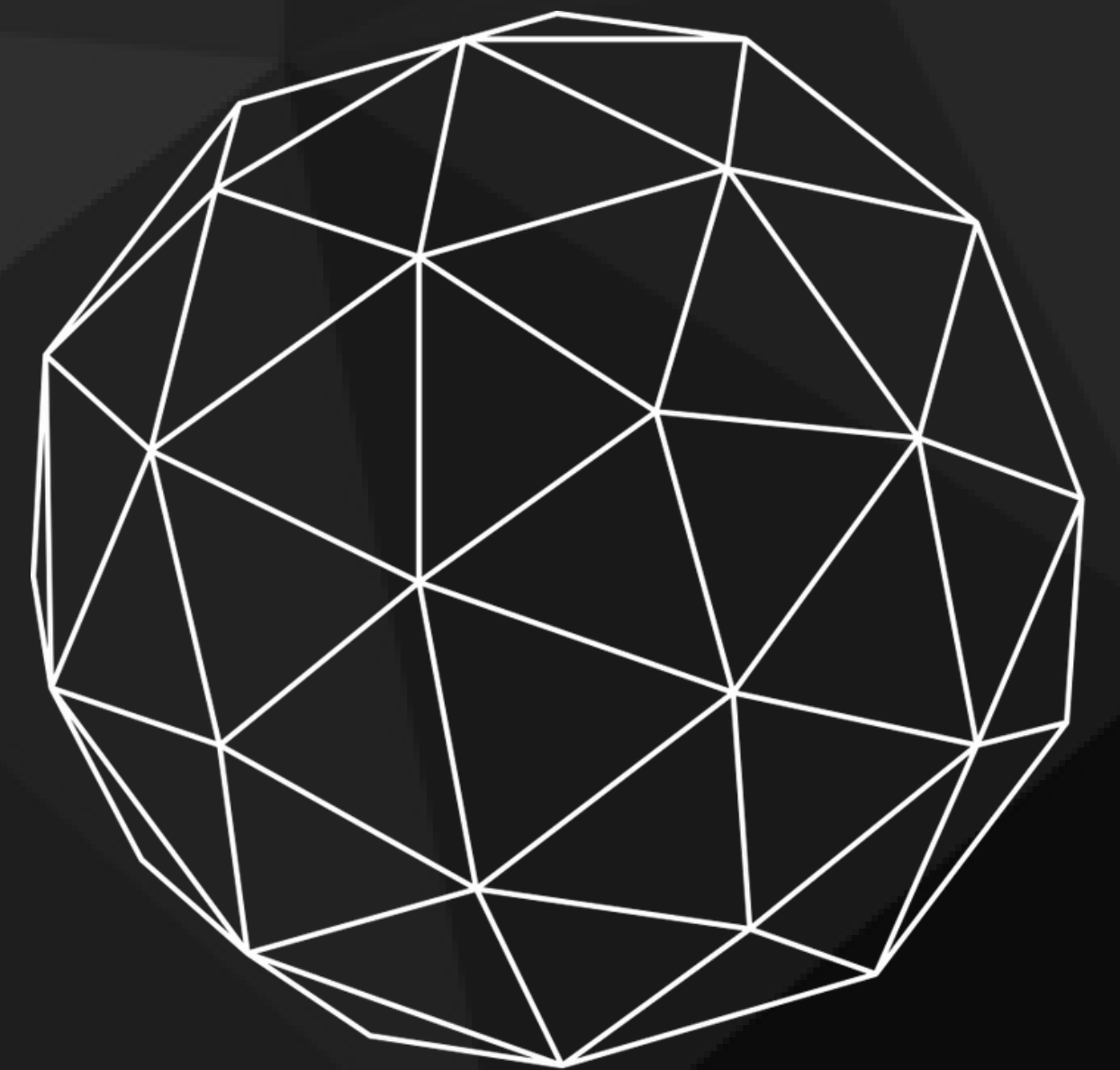
An Academically Autonomous Institute of Govt. of Maharashtra

Seminar Topic :

**BLOCK CHAIN Tech & Dev**

Name : Patel Krishna Tulsibhai

Roll No : 205168



# Overview

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- Introduction
- History.
- Smart Contract
- What is Blockchain Development
- Types of Blockchain Developer
- Tools & Technology used to Develop a Blockchain
- Application of Blockchain Technology.
- Benefits of Blockchain.
- Challenges of Blockchain Technology.
- Some Famous Blockchain Platforms



# What is Blockchain Technology ?

A blockchain is a distributed database or ledger that is shared among the nodes of a computer network. As a database, a blockchain stores information electronically in digital format. Blockchains are best known for their crucial role in cryptocurrency systems, such as Bitcoin, for maintaining a secure and decentralized record of transactions. The innovation with a blockchain is that it guarantees the fidelity and security of a record of data and generates trust without the need for a trusted third party.



# History

A horizontal timeline with five points marked by white dots. Above the timeline, the word 'History' is written in a large, orange, serif font. Below the timeline, five text blocks describe key milestones in blockchain history, each associated with a specific time period. The timeline itself is a thin white line with dots at each milestone. The background is a dark gray with a geometric, low-poly pattern.

Nakamoto Developed  
bitcoin and introduced  
the notion of blockchain  
to use decentralised  
and distributed Ledger

2009

Blockchain has  
Emerged in various  
applications with  
Further  
development.

2012-13

1990s

The Concept of  
distributed computing  
has been around  
Since 1990.

2011-12

The deployment of  
cryptocurrency in  
Practical Application  
related to cash.

2017-18

Significantly faster  
speeds with lower  
requirements  
to support IoT devices



# Smart Contract

With The help of Blockchain Technology its is possible that A Contract is computer program that directly and automatically controls the transfer of digital assets between the parties that involves in the contract. It eliminates the need if trusted third party. The blockchain technology lowering the necessity of institutions to provide risk modification and trust service.



Two Parties



Contract



Third Party



Execution

# What is Blockchain Development ?

Blockchain development is a broad category of computer science focused on creating, applying, and optimizing blockchain technology.

Blockchain development can range from stock trading to accounting, insurance to supply chain management, smart contracts to business models, and so much more.



# Types of Block chain developers

```
graph TD; Title[Types of Block chain developers] --- Line1[ ]; Line1 --- AD[Application developer]; Line1 --- CD[Core developer]; AD --- AD_L["- Solidity<br/>- JavaScript<br/>- Python"]; CD --- CD_L["- GO<br/>- C++<br/>- Rust"]
```

## Application developer

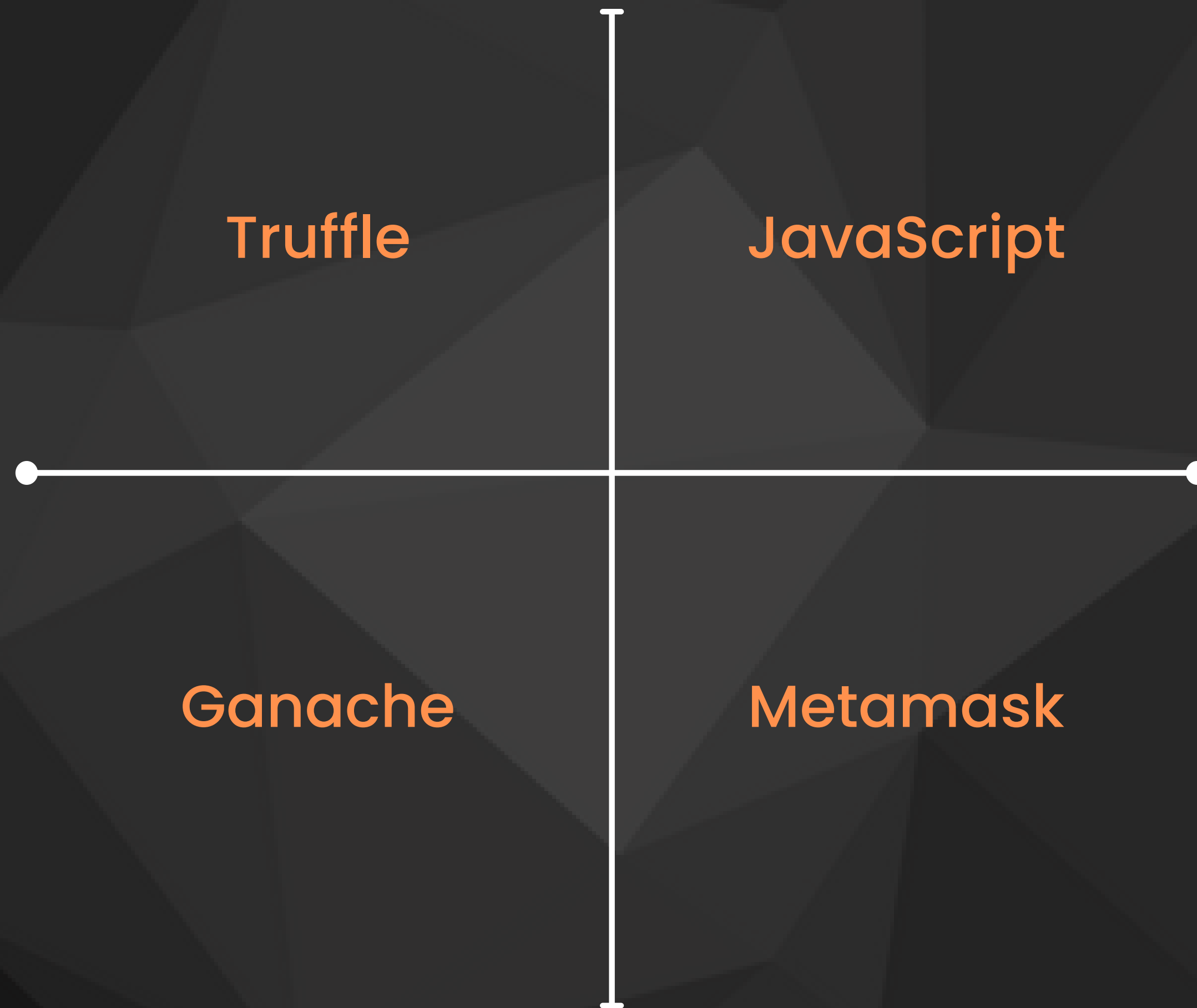
- Solidity
- JavaScript
- Python

## Core developer

- GO
- C++
- Rust



# Tools & Tech to **Develop** **Block chain**



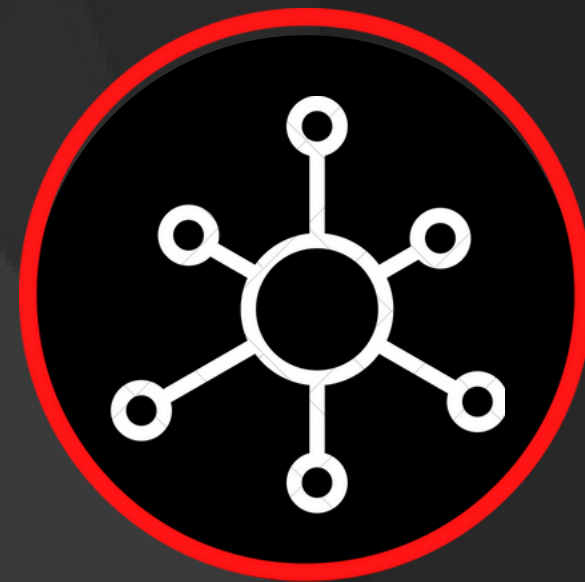
# Benefits of Blockchain



Transparency



Reduced Transaction  
Cost.



Fast Transaction  
Settlements



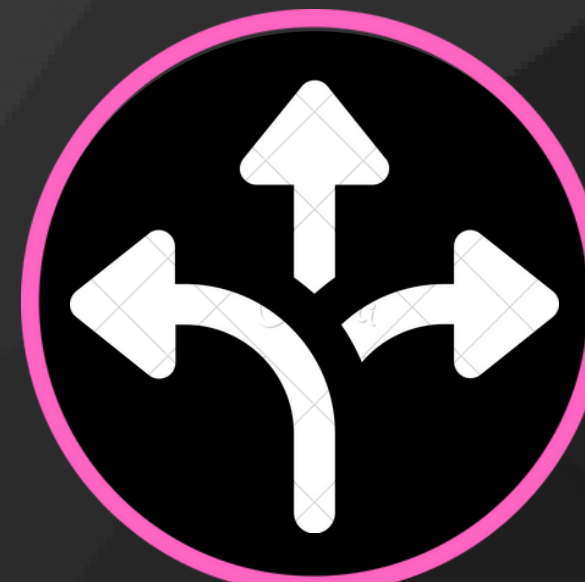
Security



Worldwide  
adoption



Automated  
Operation



Flexible



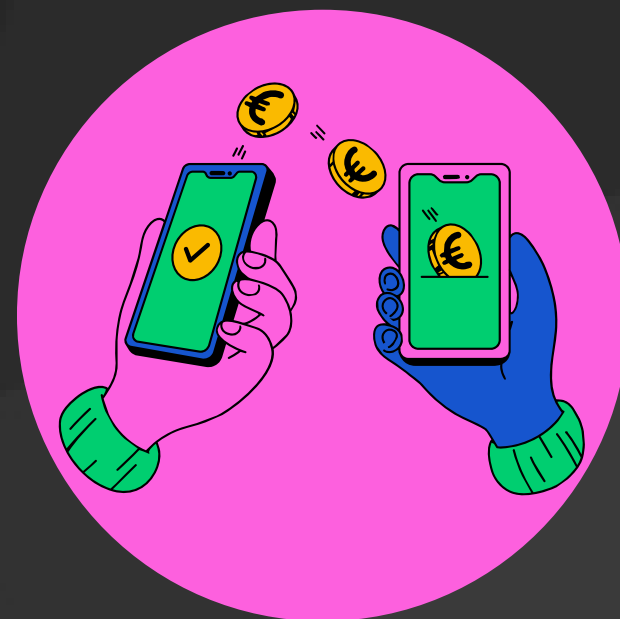
Distributed  
Architecture

# Applications of Block chain Technology



## Bitcoin

The idea of a blockchain was first conceived as the mechanism supporting Bitcoin.



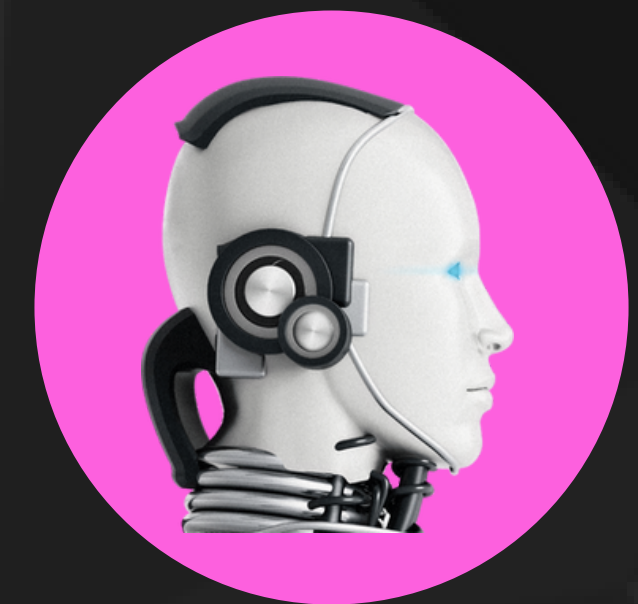
## Money Transfer Service

Money transfers using blockchain can be less expensive and faster than using existing money transfer services.



## NFT

NFTs, is a digital art putting an NFT on the blockchain guarantees that only a single copy of a piece of digital art exists.



## AI

AI BlockChain is a digital ledger that employs intelligent digital agents to govern the chain.

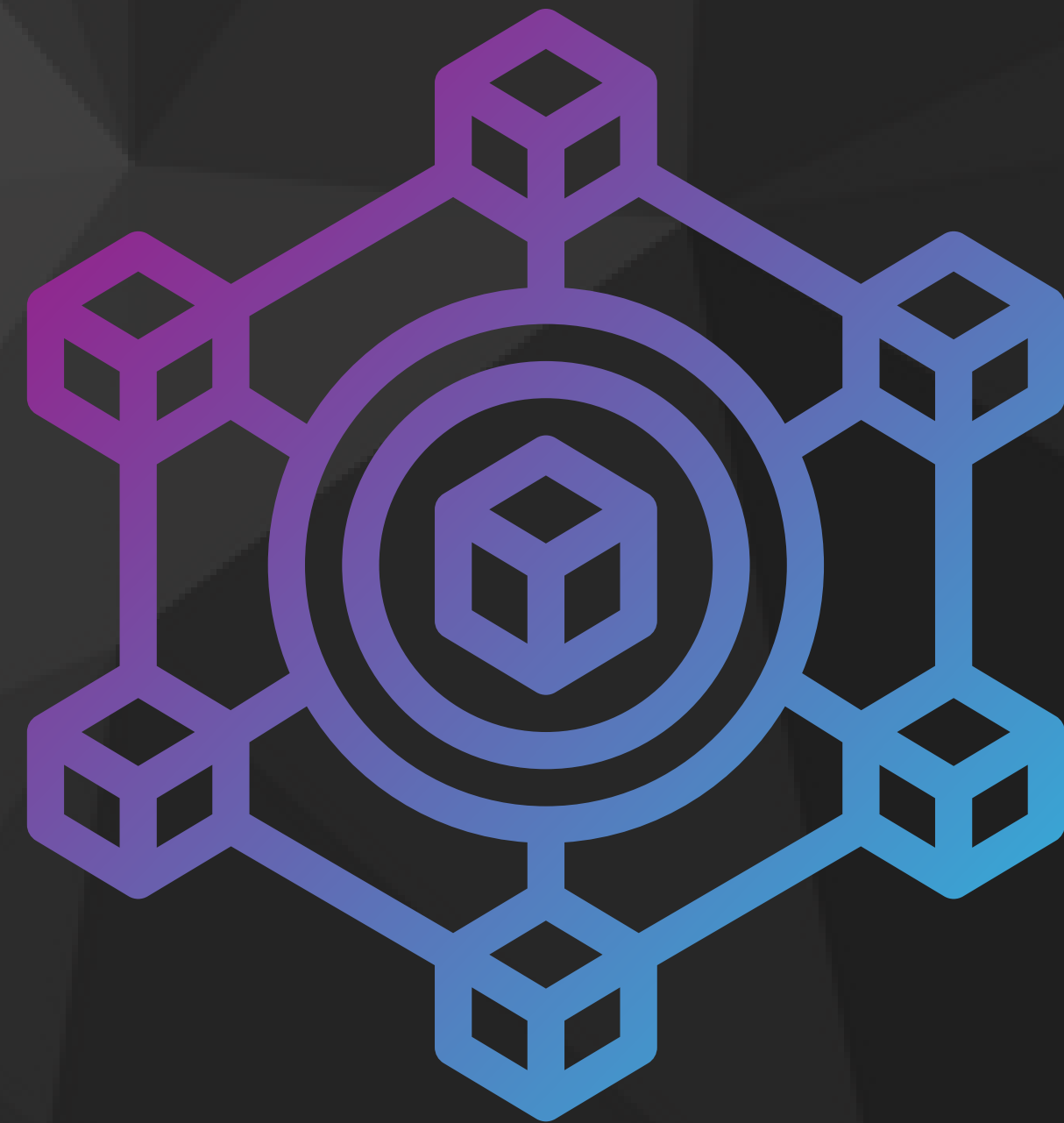
# Challenges of Blockchain Technology

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In some countries, the use of blockchain technology applications is banned like cryptocurrency due to some environmental issues. Blockchain databases are stored on all the nodes of the network creates an issue with the storage, increasing number of transactions will require more storage.

# Some Famous Blockchain Platforms

- IBM Blockchain
- Ethereum
- Steller
- Solana







Thank You