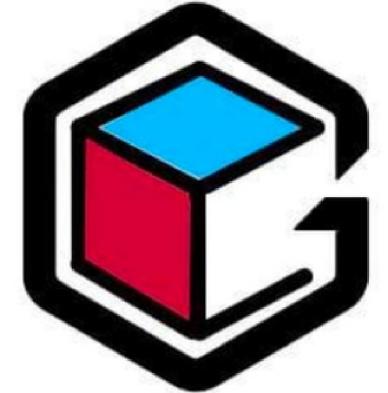


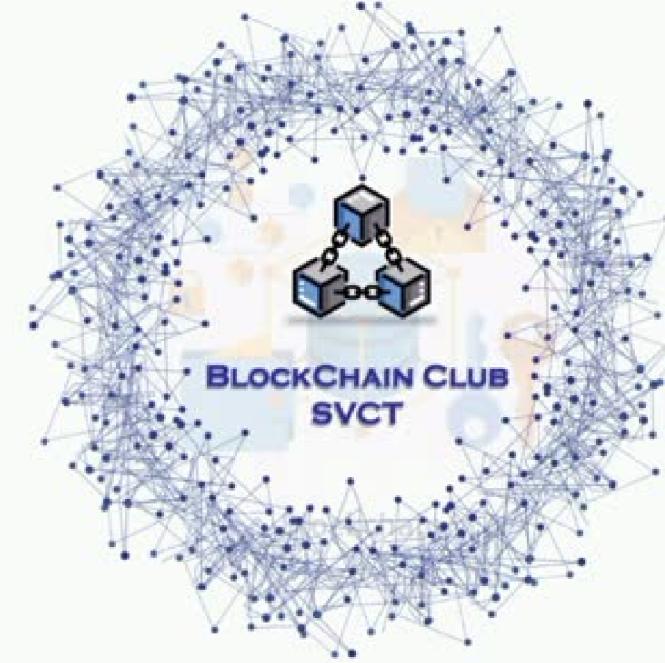


SRI VENKATESWARAA COLLEGE OF TECHNOLOGY

Approved by AICTE, New Delhi
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An Autonomous Institution
(Conferred Autonomous Status by UGC)



GITATHON
SVCT-BLOCKCHAIN CLUB



Ethereum blockchain and smart contracts.

Designed by
Nallani Yasaswini
B.Tech AR&DS

TOPICS

1. ETHEREUM OVERVIEW
2. ETHEREUM VIRTUAL MACHINE
3. STRUCTURE OF ETHEREUM IN SMART CONTRASTS
4. SOLIDITY FEATURES



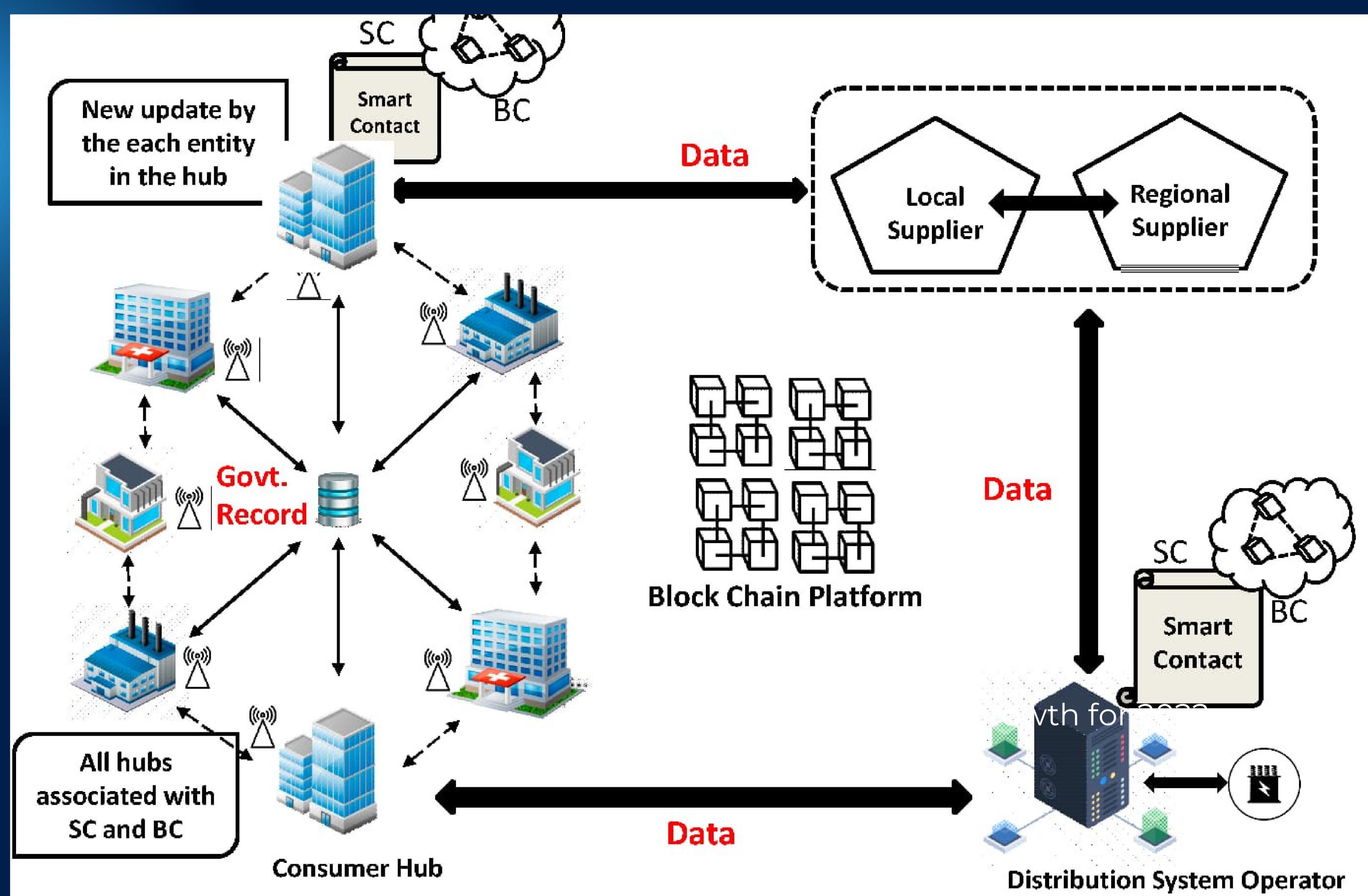
Ethereum

[i-'thir-ē-əm]

An open-source blockchain that is known for its smart contracts functionality, and which serves as the basis for the cryptocurrency ether (ETH).



Ethereum is a decentralized global software platform powered by blockchain technology. It is most commonly known by investors for its native cryptocurrency, ether (ETH), and by developers for its use in blockchain and decentralized finance application development



ETHEREUM VIRTUAL MACHINE:

The Ethereum Virtual Machine (EVM) is a crucial component of the Ethereum blockchain platform, serving as the runtime environment for executing smart contracts and decentralized applications (DApps). It operates as a decentralized computer that runs on the global network of Ethereum nodes.



ONTology

EVM 101

The Ethereum Virtual Machine





Smart Contracts are simple programs stored on a blockchain network. You can say it's like an agreement between two people in the form of computer code. The transactions in a smart contract are processed by the blockchain and stored as a 42 character hex address with the prefix "0x"



No middlemen



Savings



*Autonomous
Execution*



*Trustless
Execution*



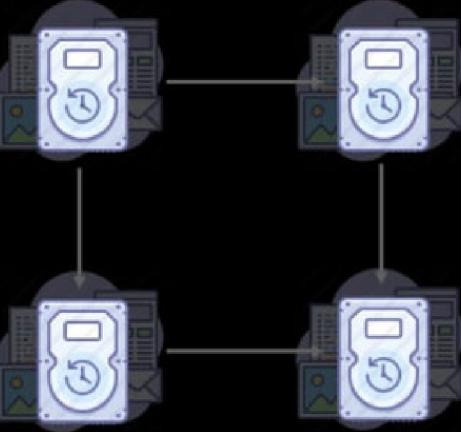
SMART CONTRACTS



*Avoid Manual
Error*



Code Is Law



*Default
Backups*

OVERVIEW OF ETHEREUM 1.0



What Is Solidity?

Solidity is a type of object-oriented programming language. This programming language is developed specifically for smart contracts.

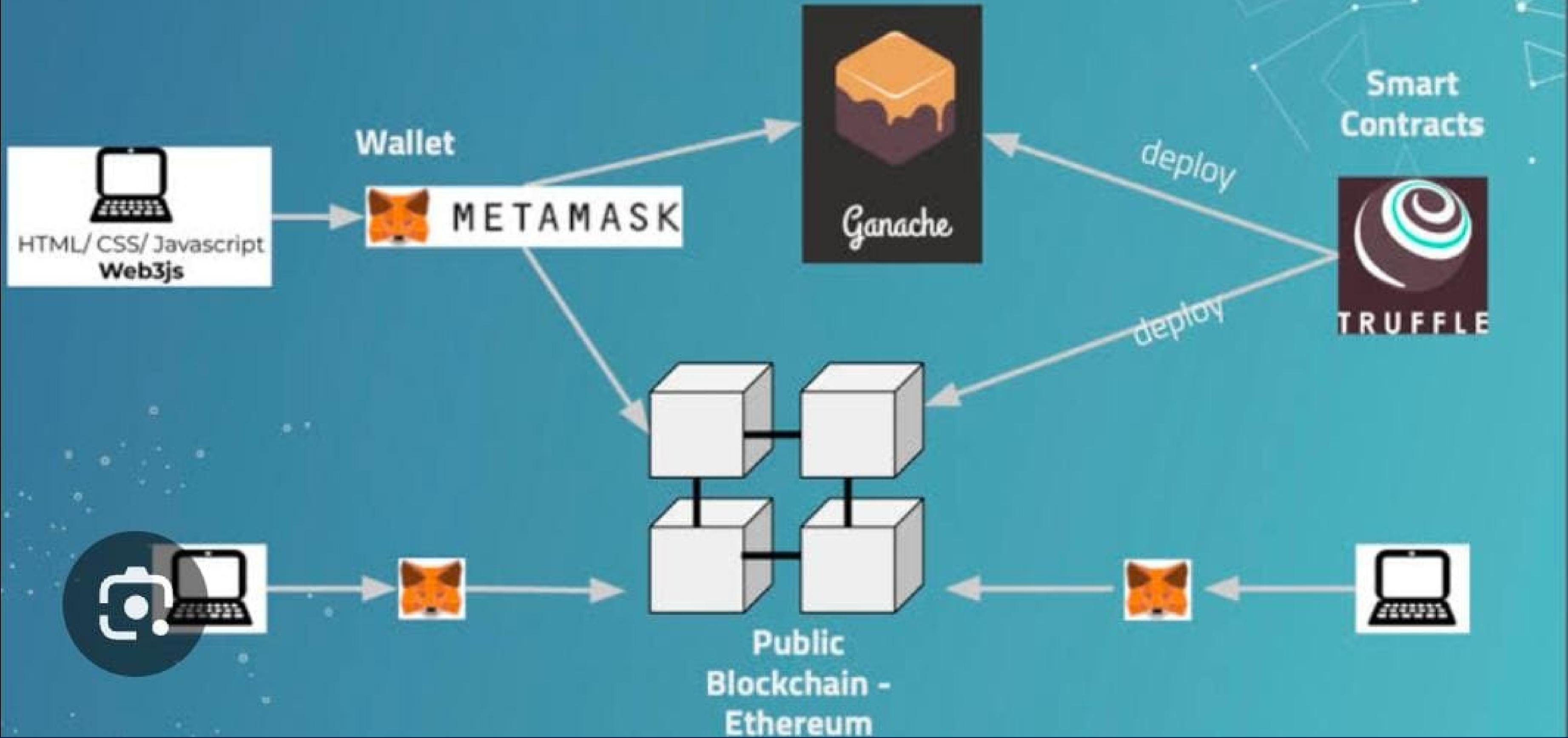
This type of language is widely used in creating smart contracts features in blockchain platforms. It's influenced by C++, JavaScript and Python. Solidity also uses Ethereum Virtual Machine to function properly.



Ethereum Empowered: Shaping the Future of Digital Transactions through Smart Contract Mastery



Personal Blockchain - development



Businesses to Benefit From Ethereum and the Many Eth-based Scaling Solutions

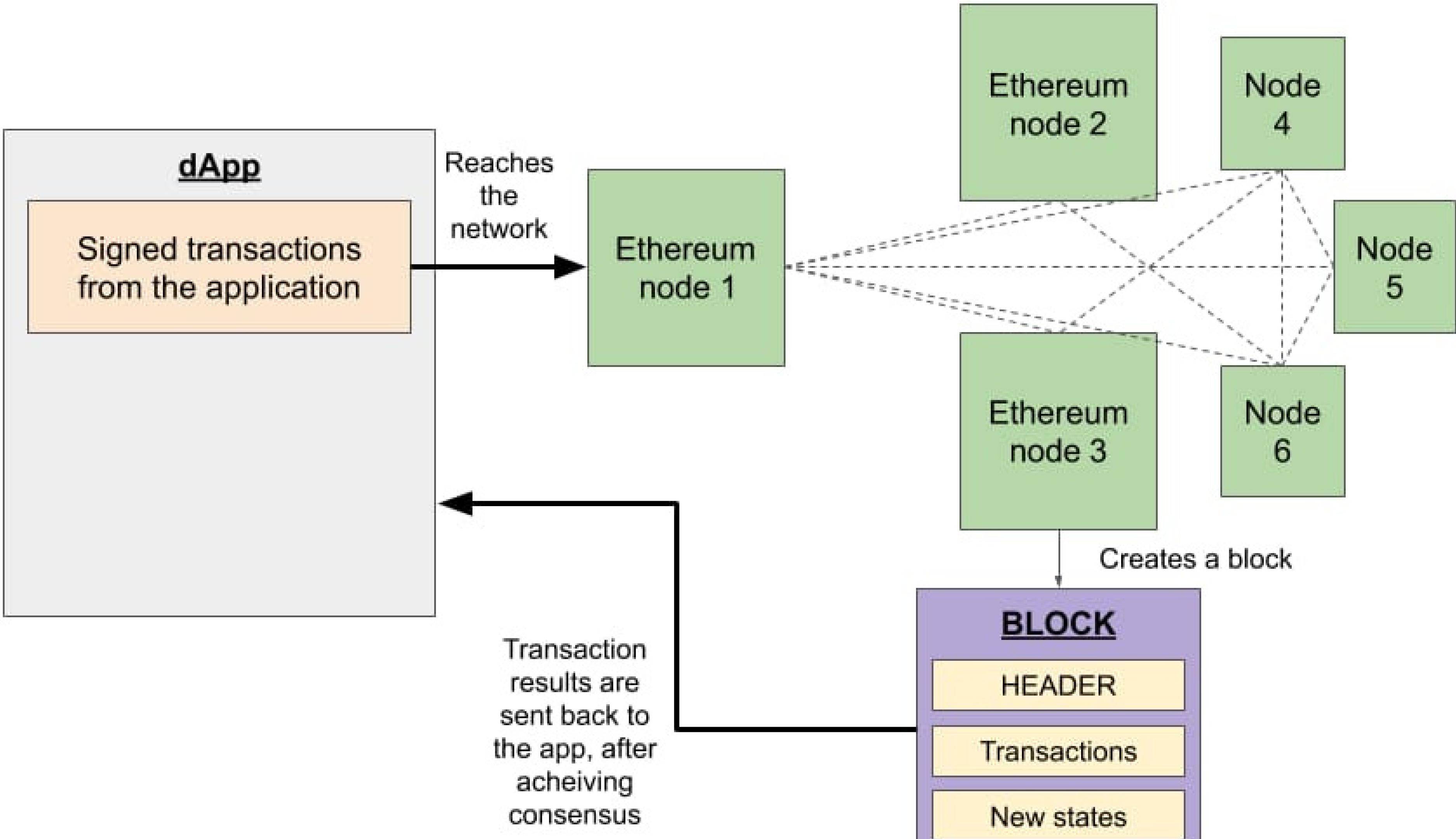
\$19B

Estimated in global business blockchain spending by 2024 (IDC)



- Layer-2 (L2) scaling solutions help solve businesses' public blockchain challenges today

The EEA Mainnet Working Group, in collaboration with EEA members, helps businesses understand how Layer-2 scaling solutions fit different business needs



THE ETHEREUM OVERVIEW

WHAT IS IT?

Ethereum is a decentralized network that can be used to create and run specialized digital applications. The ethereum platform builds off of the blockchain technology originally developed for bitcoin. Ether (ETH) is Ethereum's native currency.



KEY BENEFITS

As a decentralized network, there can be no single point of failure in the system. This makes ethereum less vulnerable to hacking, power outages, and other threats that might compromise user data.



Autonomous



Reliable



Multi-Purpose



BUY AND SELL ETHEREUM WITH ROCKITCOIN

 rockitcoin

HOW DOES ETHER WORK?

The ethereum platform is fueled by ether coins at every step. Applications are required by ethereum's code to pay for every operation they perform. Ether is also provided as a reward to users who contribute resources to the decentralized network by mining.

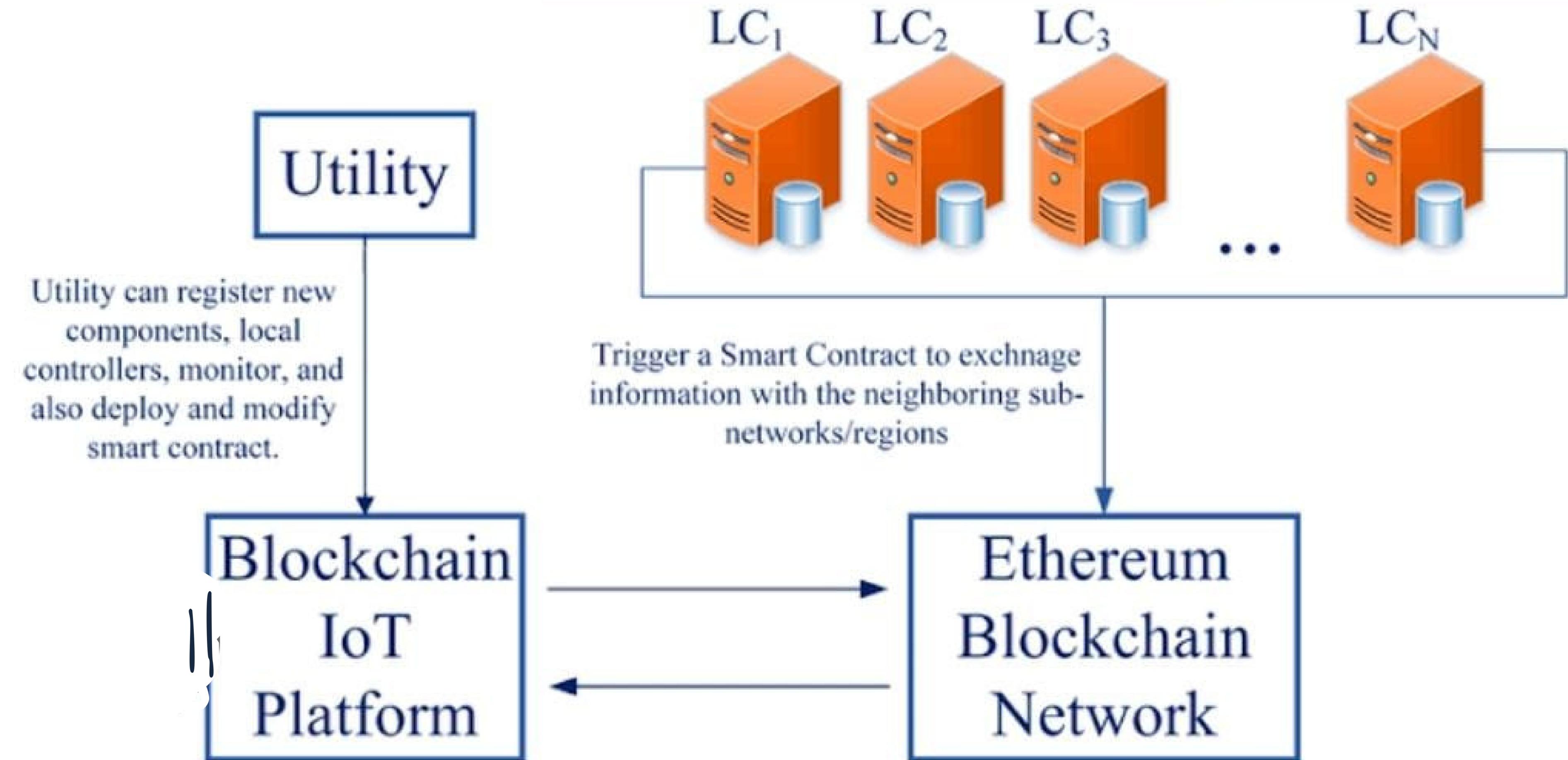


ETHEREUM ORIGINS

The Ethereum network was first proposed in a white paper written by a 17-year old computer scientist named Vitalik Buterin. The concept quickly gained traction after Buerin presented his idea at a Bitcoin conference in Miami.



LC: IoT Enabled Sub-Network/Region Local Control





Advantages of Ethereum

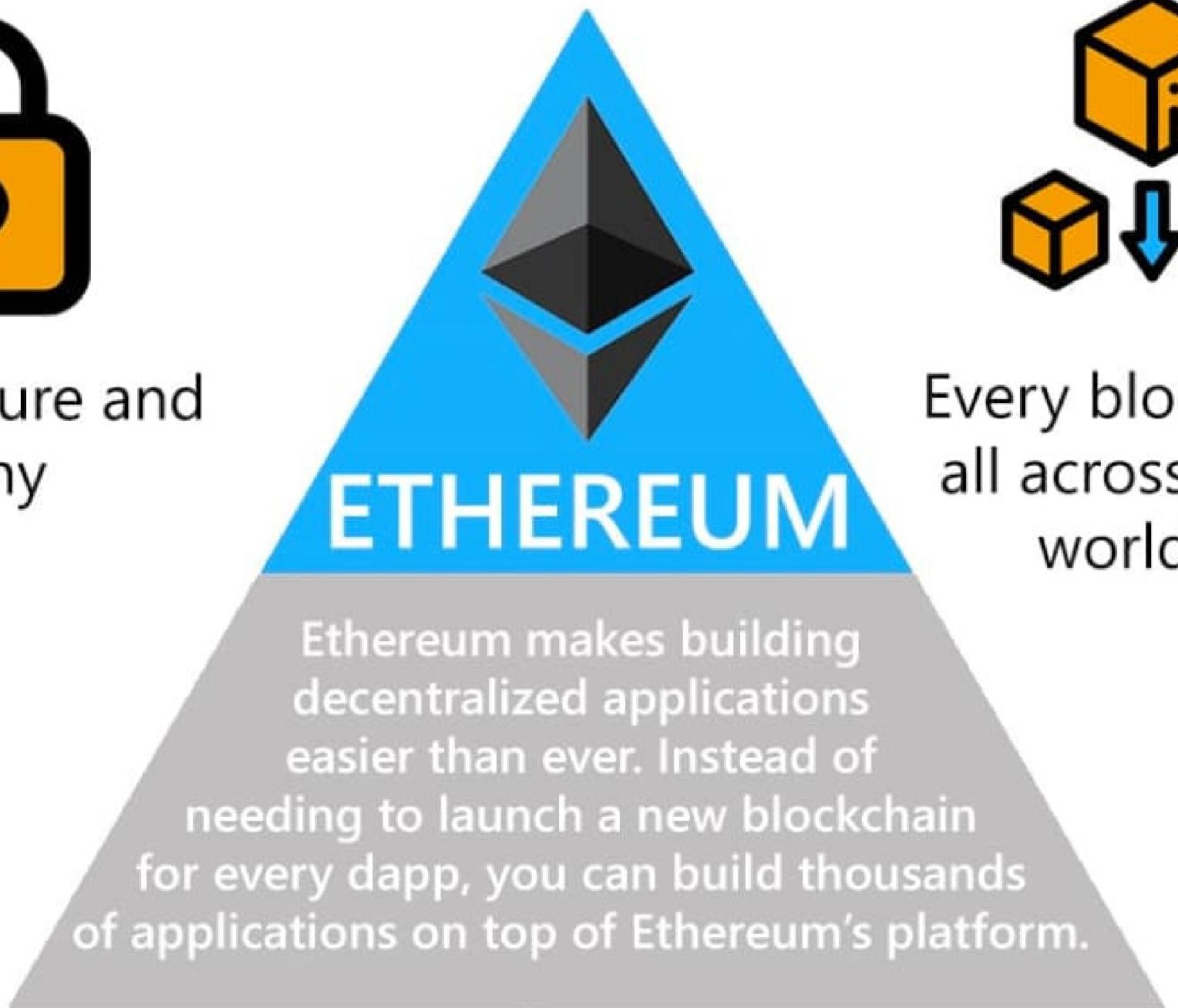


Decentralized Networks

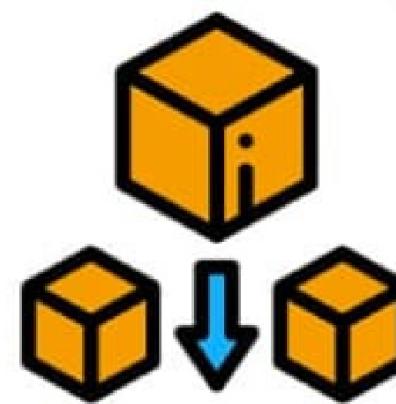
- ✓ Immutable
- ✓ Tamper Proof
- ✓ Secure



With no central point of failure and security by cryptography, any applications are protected against fraud and attacks.



Blockchains



- ✓ Trustless
- ✓ Global
- ✓ Permanent

Every block of information is stored all across the network, leading to a world-wide environment where everyone is in the know.

Conclusion



01

Ethereum compatibility with Qtum offers developers a way to build decentralized applications that are faster and more cost-effective than those built solely on the Ethereum blockchain

02

Businesses can benefit from using the Qtum blockchain for data storage and transaction execution, while also leveraging the smart contract functionality of the Ethereum ecosystem

03

Ethereum compatibility with Qtum opens up new possibilities for blockchain-based solutions in industries such as finance and supply chain management



ethereum
THANK YOU

yashu...