SNS COLLEGE OF ENGINEERING

Kurumbapalayam (Po), Coimbatore – 641 107

An Autonomous Institution

Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A' Grade
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

DEPARTMENT OF COMPUTER SCIENCE AND TECHNOLOGY

COURSE NAME: 19CS622-Blockchain Technology

III YEAR /VI SEMESTER

Unit 1- INTRODUCTION TO BLOCKCHAIN

Topic 5 : Benefits of Blockchain

Benefits of Block chain

A digital ledger that keeps a record of all transactions taking place on a peer –to-peer network	All information transferred via blockchain is encrypted and every occurrence recorded, meaning it cannot be altered	It is decentralized, so there's no need for any central, certifying authority	It can be used for much more than the transfer of currency; contracts, records and other kinds of data can be shared	Encrypted information can be shared across multiple providers without risk of a privacy breach

Benefits of Block chain

<u>Enhanced security</u>

- Data is sensitive and crucial, and block chain can significantly change how you view your critical information.

- By creating a record that can't be altered and is encrypted end-to-end, the block chain helps prevent fraud and unauthorized activity.

Benefits of Block chain

Greater transparency

- Without block chain, each organization has to keep a separate database.

- Because block chain uses a distributed ledger, it records transactions and data identically in multiple locations.

- All network participants with permissioned access see the same information at the same time, providing full transparency.

- All transactions are immutably recorded, and are time- and date-stamped.

- This capability enables members to view the entire history of a transaction and virtually eliminates any opportunity for fraud.

Benefits of Block chain

Automation

- "Smart contracts" can automate transactions, further increasing your efficiency and speeding up the process.

- After the pre-specified conditions are met, it automatically triggers the next step in the transaction or process.

Benefits of Block chain

<u>Increased efficiency and speed</u>

- Traditional paper-heavy processes are time-consuming, prone to human error, and often requires third-party mediation.

- By streamlining these processes with block chain, you can complete transactions faster and more efficiently.

- You can store documentation on the block chain along with transaction details, eliminating the need to exchange paper.

- There's no need to reconcile multiple ledgers, so clearing and settlement can be much faster.

References

TEXT BOOKS

1. Mastering Bitcoin: Unlocking Digital Cryptocurrencies, by Andreas M Antonopoulos 2018

2. Imran Bashir, "Mastering Blockchain: Distributed Ledger Technology, Decentralization and Smart Contracts Explained", Second Edition, Packt Publishing, 2018.

3. https://101blockchains.com/blockchain-vs-database-the-difference/

REFERENCES

1. William Mougayar, "Business Blockchain Promise, Practice and Application of the Next Internet Technology, John Wiley & Sons 2016.

2. Josh Thompson, 'Blockchain: The Blockchain for Beginnings, Guild to Blockchain Technology and Blockchain Programming', Create Space Independent Publishing Platform, 2017.

3. Arvind Narayanan, "Bitcoin and Cryptocurrency Technologies: A Comprehensive Introduction", Princeton University Press, July 19, 2016.

4. Henning Diedrich, Ethereum: Block chains, Digital Assets, Smart Contracts, Decentralized Autonomous Organizations-2016

Thank You