

THE WALL MAGZINE OF IT DEPARTMENT

EDITION 2020



PATRONS

Sh. Atam Prakash Kaushik (Chairman)
Padma Sh. Surender Sharma
(Sr. Vice President)
Sh. Vinod Vats (Gen. Secretary)
Sh. Ram Babu sharma (Secretary)
Prof. Payal Pahwa (Principal)
Prof. A.K. Tandon (Founder Director)
Prof. Y.D. Gaur (Executive Director)
Prof. (Dr.) Abhishek Swaroop
(HOD IT& Head TnP)

EDITORIAL BOARD

FACULTY COORDINATOR

Ms. Varsha Sharma (Asst. Prof.)

STUDENT COORDINATORS

Onkar Manuja (1st year)

Hritik Kesharwani (1st year)

A. Agnihotri (2nd year)

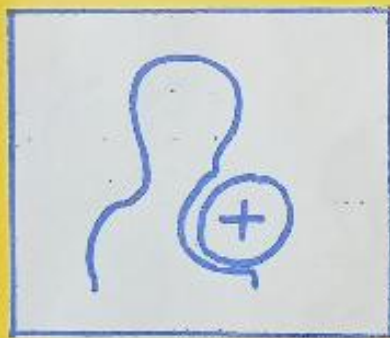
Tarushi Kapoor (2nd year)

BLOCKCHAIN

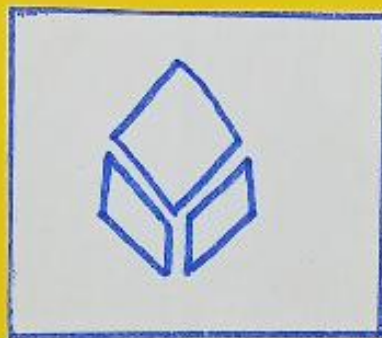
A BLOCKCHAIN IS A GROWING LIST OF RECORDS, THAT ARE LINKED USING CRYPTOGRAPHY. EACH BLOCK CONTAINS A CRYPTOGRAPHIC HASH OF THE PREVIOUS BLOCK, A TIMESTAMP AND TRANSACTION DATA.

BY DESIGN, A BLOCKCHAIN IS RESISTANT TO MODIFICATION OF DATA. IT WAS INVENTED BY A PERSON USING NAME SATOSHI NAKAMOTO IN 2008. THE IDENTITY OF SATOSHI NAKAMOTO IS UNKNOWN

HOW DOES BLOCKCHAIN WORK? A STEP-BY-STEP VIEW



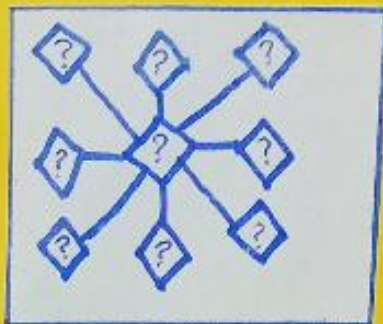
A user requests for a transaction



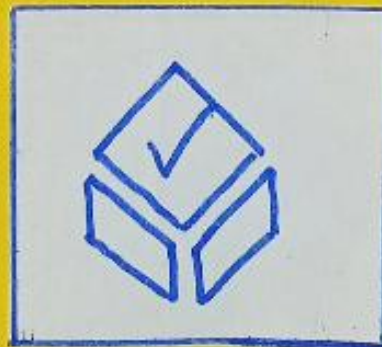
A block representing the transaction is created



The block is broadcasted throughout the network



All nodes validate the block



The block is added to Blockchain



Transaction gets verified

BLOCK CHAIN TECHNOLOGY

"Technology is neither good nor bad; nor is it neutral." Inspiring us, we can vitiously apply new technology for framing application according to our needs.

Blockchain is not a bitcoin or any crypto-currency. As the name suggest it is a list of blocks, a distributed collection of immutable data or code which is linked and secured with some crypto-hash (Finger-print) and is publicly available over the Internet.

Bitcoin and other cryptocurrencies are the most popular examples of Block-chain usage. Financial transactions, real estate, asset management, health care services and many more uses are being explored.

Block-chain was invented by a person (or group) using the name Satoshi Nakamoto in 2008 to serve as public transaction ledger of cryptocurrency bitcoin.

The invention of the block-chain for bitcoin made it the first digital currency to solve the double spending problem without the need of a trusted authority or central server.

By design a block-chain is resistant to modification of the data. It is "an open distributed ledger that can record transactions b/w two parties efficiently and in a verifiable and permanent way."

AJAY SINGH
2nd Year

HYPER - AUTOMATION

Hyperautomation is the application of advanced technologies like Artificial Intelligence (AI) and Machine Learning (ML) to automate processes in ways that are significantly impactful more than traditional automation capabilities.

It's the next step beyond Robotic Process Automation (RPA), further replacing human involvement in physical and digital tasks.

Hyperautomation unlocks maximum potential as :-

- Artificial intelligence capabilities. such as machine learning (ML), natural language processing (NLP), AI computer vision, so robots can read, see and process more.
- In Finance terms, with RPA, low-level tasks are managed automatically, and financial organisations can spend more time offering strategic decision making advice with automated reports.
- Advanced and fast analytics
- Automated processes that are reliable
- Greater compliance and reduced time

Divyanshu Varun (2ND Yr IT)

- Divyanshu Varun

10-IT-18



Designer

TOUCH COMMERCE

Touch Commerce, now part of Nuance Communications, Inc., is the innovator in custom online engagement solutions that optimize conversion results for market leading brands. Founded with a retail driven perspective to replicate the in store customer experience online, we combine leading edge technology and deeply experienced talent to identify and convert high value site visitors by providing the live assistance they need to complete their purchase.

Touch Commerce could have a significant impact on reducing cart abandonment while improving the mobile checkout experience. However, retailers will only reap the benefits of Touch Commerce when mobile sites and apps are user friendly and appealing. As Deloitte explains a simplified checkout process is not the only prerequisite for mobile commerce. Marketers still have a lot of work ahead of them to improve the mobile experience. Touch Commerce has the potential of increasing m-commerce sales but its only one piece of the puzzle to increasing sales on mobile devices.

Information Retrieval

Information Retrieval (IR) is the science of searching for documents or information which can be text, multimedia and may even reside on the web. The difference between traditional information retrieval and database systems is that IR assumes: (1) The data under search is unstructured (2) Queries are formed mainly by keywords, without complex structures (unlike SQL in RDBMS).

The typical approach in IR adopts probabilistic Models. Eg- Text document can be seen as a multiset of words. The document's language model is a Probability Density Function that generates a bag of words in the document. Similarity between two documents can be measured by similarity between their corresponding language models. Further, a topic in a set of text documents can be modelled as a probability distribution over the vocabulary, which is called topic model.

A text document, involving one or multiple topics, can be regarded as a mixture of multiple topic models. By integrating IR and data mining techniques, we can find major topics in a collection of documents and for each document, the major topics involved. Large amount of text and multimedia data have been accumulated and made available online due to fast growing web applications - digital libraries, digital govt. and healthcare information systems. Their effective search and analysis have raised many challenges in data mining. Therefore, text mining and multimedia data mining, integrated with IR methods, have become increasingly important.

- Tarushi Kapoor
IT, 2nd year

WiMAX TECH

Wimax, the "worldwide interoperability for Microwave Access", enables the delivery of wireless broadband service over long distance. WiMAX is based upon IEEE 802.16 Standard, also called WirelessMAN, which was developed for non-line-of-sight (LOS) communication.

High Speed bandwidth and wireless connectivity make WiMAX suitable for the following applications:

- > Connecting Wi-Fi hotspots with each other and to other part of Internet.
- > Providing a wireless alternative to cable.
- > Providing high speed data and telecommunication services.

WiMAX VS Wifi :-

- > WiMAX uses the IEEE 802.16 Standard which is a newer standard of 802.11 which Wifi uses.
- > WiMAX has a much higher bandwidth at a maximum 70 Mbps versus Wifi at 54 Mbps.
- > WiMAX has a range of up to 50km.
- > WiMAX is highly scalable.

NAMAN KATHURIA
2nd Year

Colours & Shapes