

**A Case study for a project proposal to keep records for all supermarket transaction based on a Blockchains Technology**

THE PROPOSED PROJECTS

● Supermarkets transactions blockchain based system

● Disk Space Renting system

● Insurance covers blockchain based system

● Air bnb companies’ blockchain based system

**Reason as to why we chose the E-voting blockchain based system for our purpose:**

Electronic voting systems have replaced paper based systems, but even now people doubt the voting system’s ability to secure the data and defend against any attacks, the blockchain-based system can ensure transparent and publicly verifiable elections in the country. If implemented successfully, voting can be done using mobile application that is attached to a blockchain system.

**GROUP MEMBERS**

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**INTRODUCTION**

Blockchain- The blockchain is a digital platform for digital assets. It consists of a continuously growing list of records known as blocks that are linked and secured using cryptography. Major usage of Blockchain has been in all crypto currency transactions, mainly Bitcoin. However, they are increasingly being used in a number of other applications because of their inherent resistance to modification to the transaction/block/whole distributed ledger - Blockchain.

In modern democracy, elections are very important but large sections of society around the world do not trust their election system which is a major concern for democracy. The blockchain is said as emerging, decentralized, and distributed technology that promises to enhance different aspects of many industries. Expanding e-voting into blockchain technology could be the solution to eliminate the present concerns in e-voting system

**PROBLEM STATEMENT**

We carried out an in-depth investigation into the electronic voting systems that enable voters to vote at their convenience using a mobile phone, computer or any other electronic device. Still, none of these technologies have been incorporated on a larger scale due to inherent security threats/concerns that these systems might pose to the integrity of the voting process. Even the world’s largest democracies like United States, still suffer from a flawed electoral system. Vote rigging, hacking of EVM (Electronic voting machine), election manipulation, and polling booth capturing are the major issues in the current voting system.

**PROPOSED SOLUTION**

We propose a fresh approach for a decentralized trustless voting platform that relies on Block-chain technology to solve the trust issues. The proposed solution was that we tried to create a system that doesn’t entirely change the current voting system but relatively integrates itself within the current system which we are using today. We decided to do this because the majority of people are familiarized with the current system and the introduction of a new system can create confusion as well as lackadaisical attitude.

**OBJECTIVES**

**Main objective**

* Main objective of this system include ensuring data integrity and transparency, and enforcing one vote per mobile phone number for every poll with ensured privacy.

**Other objective(s)**

* Speed up the voting process and reduce the amount of time spent by voters.

**LITERATURE REVIEW**

* **Online Voting**: Voting System Using Blockchain: Vaibhav Anasune, Pradeep Choudhari,MadhuraKelapure and Pranali Shirke Prasad Halgaonkar,“Online Voting: Voting System Using B-chain”,2019,article gives a short review on various methodologies that are used in current voting. The paper will help to build a system that will face the present and upcoming challenges and will remove drawbacks from these previous architectures.
* **Votereum:** An Ethereum-based E-voting system : Linh Vo-Cao-Thuy, Khoi Cao-Minh, Chuong Dang-Le-Bao and Tuan A. Nguyen,2019,“Votereum: An Ethereum-based E-voting system”,University of Information Technology Vietnam National University HCMC, Vietnam, it reviews the requirements and then propose Votereum, an Electronic voting system that utilizes the blockchain technology. The proposed system is empowered by Ethereum platform, including one server manages the entire system and the other handles all blockchain-related requests.

**REFERENCE**

* ***David Khoury,Elie F. Kfoury, Ali Kassem and Hamza Harb,(2018), Decentralized Voting Platform Based on Ethereum Blockchain***
* ***Linh Vo-Cao-Thuy, Khoi Cao-Minh, Chuong Dang-Le-Bao and Tuan A. Nguyen,(2019), Votereum: An Ethereum-based E-voting system .***
* ***S.K. Das,S,k Bose,and A. Ghosh,’A blockchain-based secure e-voting system,”2018 International Confrence on Computing.Communication and Automatio(ICCCA),2018,pp.1-6.***