TITLE: E-STAMPING IN DIGITAL VOTING SYSTEM USING BLOCK CHAIN AND CLOUD SERVER

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LITERATURE SURVEY

S.No	Name of the Paper	Author	Advantages	Limitations
1	An Efficient and Secure Mobile Phone Voting System	Mohib Ullah, Arif Iqbal Umar, Noor ul Amin, Nizamuddin	The main advantage in this system is that they are using mobile application to receive votes and results to be announced on sms this is useful in countries where internet connection is not available	Security issues exist as the sms server is included in the system.
2	A Secure Approach for Web Based Internet Voting System using Multiple Encryption	Prof. S.M. Jambhulkar Prof. Jagdish B. Chakole Prof. Praful. R. Pardhi	They proposed a online voting system which uses multiple encryption and decryption authentication of the user before voting is a feature	The voter can vote again as there is no block chain to rectify the vote casted
3	A Proposal of Blockchain-based Electronic Voting System	Cosmas Krisna Adiputra, Rikard Hjort, and Hiroyuki Sato	They solved the existing verifiability problem of Estonia's online election by implementing a decentralised BCT E-voting system.	Anonymity and Coercion Freeness may be a problem as the voter can be revealed and proof of work may not be suitable for voting system

4	A CONCEPTUAL SECURE BLOCKCHAIN-BASED ELECTRONIC VOTING SYSTEM	Ahmed Ben Ayed	The Blockchain based system will be secure, reliable, and anonymous, and will help increase the number of voters as well as the trust of people in their governments as it uses sha256 cryptographic hash.	The system is based on the assumption that voters will use secure devices to cast vote.security vulnerabilities exist.
5	A Comparative Analysis on E-Voting System Using Blockchain	Kanika Garg, Pavi Saraswat, Sachin Bisht	The proposed system is simple and secure. The paper gives a brief analysis of using different e voting systems based on bct like e-vote.	It is partially decentralised as it uses aadhaar biometric authentication as it uses a centralised server.
6	A Secure End-to-End Verifiable Internet-Voting System Using Identity-Based Blind Signature	Mahender Kumar , Satish Chand, and C. P. Katti	end to end verifiability using biometric verification of voter for authentication .Boneh–Lynn–Shacham short signature scheme that ensures the vote privacy and can verify the vote he have casted	Vulnerability of forgery attack and needed additional security features like facial recognition.
7	Digital Voting: A Blockchain-based E-Voting System using Biohash and Smart Contract	Syada Tasmia Alvi Mohammed Nasir Uddin Linta Islam	The system provides integrity, anonymity, privacy, and security of voters. With the use of markle tree and fingerprint hash, the data integrity and anonymity, privacy, security of the voters has been achieved in our proposed digital voting systems	The proposed system can’t be applied in practice as every voter doesn't have a high computation device to mine. .

8	A Study on Electronic Voting System Using Private Blockchain	Chang-Hyun Roh and Im-Yeong Lee	Blockchain technology to electronic voting. Blockchain technology provides reliability and data integrity because all untrusted network participants have the same data	Platforms have not yet offered the security requirements in electronic voting environments
9	Blockchain-Enabled E-voting	Kshetri, Nir and Voas, J	Block chain Enabled E-voting system uses an encrypted key and tamper-proof personal IDs.	There haven't been enough distributed ledger-technology and blockchain-based applications to sufficiently evaluate whether this technology is superior to current voting systems
10	Cryptanalysis on An E-voting Scheme over Computer Network	Baoyuan Kang	E-Voting over a computer network allows the voter to cast their vote remotely without going to polling booths.	The proposed system allows double voting and has a lack of anonymity.
11	Design and Development of voting Data Security for Electronic Voting	Supeno Djanali et.al.	The proposed system can handle attacks like,packet sniffing,falsifying the result,and privacy of the voter is protected.which in result ensures the Trust from voters.	Here as future enhancements the authors want to implement the mobile application.

12	E-Voting on the Blockchain	Kevin Curran	Usage Blockchain ensures the security and no tampering of votes,auditability and privacy of the voter.	Additional Security features are not implemented.
13	Anonymous Remote Voting System	Irina Dyachkova, Anton Rakitskiy	Using cryptographic protocols in remote voting systems gives security for transmitted Data and makes it impossible to fake.	More Security features like facial recognition Can be Discussed.
14	Blockchain Technology Application for Electronic Voting Systems	Valentin Sliusar et.al.	The proposed system Provides the ability to create voting lists,register,vote anonymously and transparency in voting.can be used for various type of elections.	Implementation of Identity verification is needed in order to prevent forgery.
15	Cross–Platforming Web–Application of Electronic On–line Voting System on the Elections of Any Level	Evgeniy V. Palekha et.al.	They outlined the web based voting application for remote voting procedure and have protection against Data spoofing,	The system can be enhanced by using Blockchain for a secure way of storing data.
16	Digital Divide Impact on E-voting Adoption in Middle Eastern Country	Mohammad Kamel Alomari	Takes advantage of digital divide factors such as age, gender, education,income and internet use in order to ensure higher voter participation by voters	There is an intrusion of privacy of the voter as the system relies on lots of personal information being gathered to achieve a result.

17	Electronic Voting based on Virtual ID of Aadhar using Blockchain Technology	Roopak T M and Dr. R Sumathi	Uses blockchain technology in the e-voting system in order to ensure the security of votes by preventing modification of data by cryptographic technique.	There is no sufficient data that shows traditional e-voting systems cannot be secure. So developing a system around blockchain might be needlessly complex.
18	Application For Online Voting System Using Android Device	Himanshu Vinod Purandare, Akash Ramswaroop Saini and Freddy Donald Pereira	An E-voting system designed to improve the existing voting system using an android application which will give better system security and vote casting becomes a less time consuming process and it will provide better results.	Android devices are more vulnerable to various cybersecurity risks such as malware, keyloggers and ransomware which might comprise voter information.
19	Group Signature Entanglement in E-voting System	Hamoud Alshammari, Khaled Elleithy, Khaled Almgren and Saleh Albelwi	Uses the concept of quantum computing in an e-voting system in order to solve security issues such as eavesdropping , replay attack and man-in- the- middle attack	Quantum computing technology requires expensive hardware which is out of the reach of the common voter and hence cannot be reliably used in areas outside cities such as villages.
20	ID Based Signature Schemes for Electronic Voting	Tulasi Menon and R. Sindhuja	An e-voting system designed using ID based signatures in order to ensure both the security of the vote and provides voter anonymity.	It requires a voting authority in order to check the authenticity of the votes.

21	A Study on Decentralized E-Voting System Using Blockchain Technology	Harsha V. Patil, Kanchan G. Rathi and Malati V.Tribhuwan	Implements an e-voting system using blockchain technology to resolve issues such as Vote rigging, hacking of the EVM and election manipulation.	Blockchain's complexity might hinder mainstream public acceptability of BEV. Although they provide security and accuracy it requires the trust and public confidence in order to function.
22	Blockchain technology based e-voting system	Anita A. Lahane, Junaid Patel, Talif Pathan and -0=-`Potdar	Aims to solve issues e-voting systems faces using blockchain such as election manipulation, and booth capturing	Blockchain technology is complex and requires user competence to function as intended as well as voter integrity.
23	Blockchain Enabled E-voting	Nir Kshetri and Jeffrey Voas	Uses blockchain technology in order to implement a system that enables the creation of tamper-proof audit trails for voting.	Blockchain technology is currently in a nascent state. There haven't been enough distributed ledger-technology and blockchain-based applications to sufficiently evaluate whether this technology is superior to current voting systems.

24	Online Voting System using Cloud	Ramya Govindaraj, Kumaresan P and K.Sree Harshitha	Utilises cloud technology in order to resolve the various issues faced by traditional manual voting systems such as malpractices and also allows voters to vote from any location.	Systems built using the cloud are vulnerable to data loss due to various circumstances such as floods, earthquakes and cyberattacks as it entirely depends on the service providers. This poses a major risk for voting purposes.
25	On the Design and Implementation of a Blockchain Enabled E-Voting Application Within IoT-Oriented Smart Cities	Geetanjali Rathee, Razi Iqbal, Omer Waqer and Ali Kashif Bashir	Uses blockchain technology in order to implement a secure and transparent e-voting mechanism through IoT devices with the aim of detecting and resolving the various threats caused by an intruder at various levels.	The potential challenge is to distinguish the ideal IoT devices from the malicious ones in order to establish a legitimate communication environment.
26	Research on the Voting Algorithm and its Application in Intrusion Tolerant System	Zhao Yuehua,Fan Lijuan	The voting algorithm designed produces output which is highly accurate using testing information and historical record values. It also increases the integrity of the system by making it more intrusion-tolerant.	The proposed algorithm requires more computational power as well as a large dataset in order to produce accurate results.

27	SecEVS : Secure Electronic Voting System Using Blockchain Technology	Ashish Singh, Kakali Chatterjee	Uses blockchain technology in e-voting to solve security, transparency issues and fulfil the system requirements .It uses hashing ,Merkle hash to deploy a secure e-voting system in an organisation.	Fingerprints can be used for registration purposes as the voter ID can be forged easily.
28	Towards A Privacy-Preserving Voting System Through Blockchain Technologies	Rabeya Bosri, Abdur Razzak Uzzal, Abdullah Al Omar,ASMTouhid ul Hasan,	. With the use of blockchain, we achieve data integrity which is a necessary attribute of a voting environment. The anonymity of the voters, privacy, and security of the voting environment is the main goal of this work.	The system just shows how the data can be stored securely in blockchain ,but not discussed about registration and authentication process
29	Using Ring Signatures For An Anonymous E-Voting System	Oleksandr Kurbatov, et.al.	This paper describes the mechanisms for using ring signatures to ensure anonymity in a decentralized e-voting system.	A voter can only be determined by validators with a certain probability. In addition, a user can be completely anonymous if ALL of the other members of the group collude .
30	Towards Secure E-Voting Using Ethereum Blockchain	Ali Kaan Koç ,et.al.	The system has implemented and tested a sample e-voting application as a smart contract for the Ethereum network using the Ethereum wallets and the Solidity language.	Some properties that cannot be addressed solely using this system, for example authentication of voters , require additional mechanisms to be integrated.