Serial Number TL:DR Conclusions Summarized Abstract Results Summarized Introduction Methods Used Literature Survey Limitations Contributions Practical Implications Objectives Findings Research Gap Future Research Dependent Variables Independent Variables Dataset

Paper 1 The paper proposes a blockchain-based electronic voting A blockchain-based e-voting system ensures secure, cost- The paper proposes a blockchain-based electronic voting The paper proposes a blockchain-based e-voting system. The paper focuses on blockchain-based electronic voting Evaluation of blockchain as a service for e-voting systems. Agora is a verifiable blockchain voting solution for institutions. Existing systems may enable coerced voting.

Proposes a blockchain-based e-voting system using

Introduces a secure blockchain-based electronic voting Propose a blockchain-based e-voting system using

A blockchain-based e-voting system using permissioned The paper does not address scalability for larger elections. Overcoming limitations of electronic voting systems. The provided contexts do not specify any dependent variables The provided contexts do not specify any independent

system.

It addresses limitations of existing voting systems.

efficient elections. [

system. [

[ 1

systems. [ [ [

[ 1 1 1

permissioned blockchain. [

system. [

permissioned blockchain. [

blockchain is proposed. [

Limited exploration of user experience in e-voting systems. [ Lack of comprehensive security threat analysis for blockchain 1

variables used in the study.

The study does not specify any datasets used.

The system ensures security, privacy, and transparency. 1 1 ]

1 ] ] ]

1 1 1

1 voting. ]

It utilizes permissioned blockchain for enhanced integrity. ] ]

It evaluates popular blockchain frameworks for e-voting. ]

Proposal of a blockchain-based e-voting system using Open Vote Network enables decentralized, self-tallying voting Traceability from votes to voters is not allowed. ]

] ] ]

Insufficient evaluation of different blockchain frameworks' Enhancing election security and integrity.

Paper 2 The paper presents a secure electronic voting system using The model ensures secure and accurate voting processes. The paper presents a secure electronic voting system using Only the admin can view the results.

The paper discusses a secure electronic voting system. Two separate blockchains for voter and vote details. The provided contexts do not contain information regarding th The provided contexts do not mention any limitations of the The model ensures high-end security for voting.

Voting process becomes secure and accurate using blockchain To ensure a secure electronic voting process.

The system ensures secure and accurate voting processes. The paper does not address potential scalability issues. Enhancing security measures for e-voting systems.

The provided contexts do not specify any dependent variables The provided contexts do not specify any independent

blockchain technology. [

blockchain technology. [

It utilizes blockchain technology for enhanced security. [

system. [

technology. [

[ Lack of user experience evaluation in the voting process. Improving voter anonymity and privacy protocols.

variables used in the study.

It ensures honest, accurate, and highly secure voting 1 [

1 Current voting processes are often inaccurate and unfair. 1

1 [ 1

1 No discussion on integration with existing voting systems. Developing user-friendly interfaces for diverse voters.

The study does not specify any datasets used.

processes.Voter details and votes are stored in separate ] 1 ]

Central administrators can manipulate vote results. ]

] 1 ]

] Limited exploration of voter education and awareness Exploring integration with existing voting infrastructures.

blockchains.

Voting occurs anonymously with user verification. ]

Admin clicks party logos to count votes.

The proposed model aims for high-end security.

Voting as transactions in the blockchain.

It enhances voter willingness to participate in elections. ]

To enhance voter privacy and anonymity.

Voter details and votes are stored in separate blockchains. strategies.

Assessing scalability of blockchain in large elections.

Paper 3 The paper proposes a blockchain-based voting protocol. A native voting mechanism on blockchain is proposed. The paper proposes a blockchain voting protocol for The proposed protocol ensures correct voting results. The paper discusses blockchain voting protocols for

A native blockchain voting protocol is proposed.

The literature review discusses online voting techniques and Existing online voting mechanisms depend on trusted Proposed a native blockchain voting protocol for

A native voting mechanism is proposed for blockchain To propose a native blockchain voting protocol.

A native blockchain voting protocol was proposed.

No well-designed mechanism for peer voting exists.

Testing and optimization of the proposed voting protocol. The provided contexts do not specify any dependent variables The provided contexts do not specify any independent

It ensures privacy and detects cheating without trusted [

decentralized decision-making. [

decentralized decision-making. [

their gaps.

authorities.

decentralized decision-making.

networks. [

[ [ [

variables used in the study.

parties. 1 [

1 [ 1 [ [

[ [ 1

1 1 1

The study does not specify any datasets used.

Implementation is demonstrated on Hyperledger Fabric. ] 1 ]

1 ] 1 1

1 1 ]

] ] ]

The protocol is feasible for small to medium voting problems. The protocol protects voter privacy and detects cheating. ]

It guarantees integrity and auditability of voting data. ]

Voting process includes five stages: voting, verification, ] ]

] ] To preserve voter privacy during the voting process. The protocol preserves end-to-end voter privacy.

Existing mechanisms depend on trusted authorities for Evaluating potential security attacks, like cartel attacks.

Paper 4 The paper presents an e-voting system using mobile The e-voting system enhances voting convenience and The paper discusses an e-voting system using mobile The system enables quick and easy voting without polling Voting is a fundamental right in democratic countries. Android application developed using Android Studio. Kalaichelvi proposed a new encryption technique using The provided contexts do not mention any limitations of the The paper transforms traditional voting to mobile application E-voting system enhances voting convenience and efficiency. To develop a mobile application for e-voting.

The e-voting system simplifies the voting process using mobile The paper does not address potential security vulnerabilities Enhancing security measures for e-voting systems.

The provided contexts do not specify any dependent variables Voter ID

applications.

efficiency.

applications.

booths. [

[ substitution tables.

proposed e-voting system.

voting. [

[ applications.

in mobile voting.

Improving user interface for better accessibility. [

It enhances voting convenience and efficiency for users. [ [

[ 1 1 [

[ 1 1 [

Lack of user experience evaluation for the e-voting

Exploring blockchain technology for vote integrity.

1 The study does not specify any datasets used.

Users can vote without visiting polling booths. 1 1 1 ] ] 1

1 ] ]

1 application.

Investigating voter anonymity in mobile voting. ]

The system employs OTP for voter authentication. ] ]

] Traditional voting is time-consuming and paper-intensive. Front end created with XML and Java. ]

] Reduces time and effort for voters.

To enhance voting convenience and efficiency. ]

No comparison with existing e-voting systems or

Analyzing the impact of mobile voting on turnout rates.

Voter Name

Paper 5 Developed a smartphone app for election authorities. The application is usable for election authorities.

The paper addresses challenges in electronic voting protocols. The application achieved all six sub-goals in evaluations. The paper addresses challenges in electronic voting protocols. Implementation of a smartphone application for election The paper discusses challenges in electronic voting protocols. Existing protocols are not user-friendly for non-technical Development of a smartphone application for election Development of a usable application for election authorities. Develop a usable application for election authorities. A usable application for election authorities was developed. Understanding of the underlying security model is unclear for Integrate group discussion insights into educational material. Usability of the implemented application.

The provided contexts do not specify any independent

Implemented distributed key generation and decryption [ [

[ [ authorities. [

authorities.

authorities. [

[ [ users. [

[ variables used in the study.

protocols. 1 1

Aimed to enhance usability for non-technical users. ] ]

1 1 [ 1 [

] ] 1 ] 1

[ 1 1

1 ] ]

1 [ 1 1

] 1 ] ]

The study does not specify any datasets used.

Educational materials created to explain security concepts. Participants struggled to understand the security model. It implements a smartphone application for election

Participants successfully generated election keys and tallied Existing implementations are unsuitable for non-technical ]

Existing implementations are unsuitable for non-technical ]

] Implementation of distributed key generation and decryption Implement distributed cryptography for real-world election Participants achieved all sub-goals in the election process. ]

Conduct a complete user evaluation of the application. Understanding of the underlying security model.

Paper 6 MobiChain is a mobile blockchain application for m-commerce MobiChain enhances m-commerce security using blockchain Mobile security is crucial due to m-commerce growth. MobiChain secures transactions in mobile commerce using The paper addresses mobile security in m-commerce. Introduction of MobiChain for m-commerce data security. Bitcoin's success spurred blockchain research in various fields. The platform for general blockchain operations is missing. Introduction of MobiChain for secure m-commerce

MobiChain enhances data security for mobile transactions. Introduce MobiChain for securing m-commerce transactions. MobiChain secures m-commerce transactions using

Limited exploration of scalability challenges in mobile Enhancing mobile blockchain mining efficiency.

Execution time of the chain verification process.

The provided contexts do not specify any independent The dataset records private data on local devices.

security.

technology. [

blockchain technology. [

[ [ [

transactions. [

[ blockchain technology.

blockchain applications. [

[ variables used in the study. [

It enables mining processes on mobile devices efficiently. [ 1

The application enhances transaction security and promotes 1 ]

[ 1 1 1 1

1 ] ] ] ]

[ 1 1

1 ] ]

[ Lack of comprehensive evaluation on various mobile devices. 1 1 1

1 Insufficient comparison with existing mobile blockchain ] ] ]

m-commerce development. ]

Blockchain offers effective security solutions for m-commerce ]

Blockchain technology is proposed as a security solution. Development of Mobile Blockchain Application Programming Blockchain technology is applied in smart contracts and Current Android mining applications are still demo versions. ]

Mining processes can occur on mobile devices.

Develop a Mobile Blockchain API for mobile mining processes. ]

solutions.

Addressing security concerns in m-commerce applications. Energy consumption during the chain verification process.

It broadcasts the chain to connected devices in the network.

Paper 7 The paper explores blockchain for Android mobile app data Blockchain enhances mobile app data storage security and The paper investigates blockchain for Android mobile app data The paper proposes the BSADS framework for Android data The paper investigates blockchain for Android mobile app Review of prior research on blockchain and mobile app Blockchain technology revolutionizes various industries, Unsuccessful implementations in mobile voting projects. Overview of blockchain integration in mobile app data Blockchain enhances security and reliability of mobile app Investigate blockchain integration for Android mobile app Blockchain enhances security and reliability of mobile app Energy efficiency in blockchain applications for mobile devices. Energy efficiency in blockchain applications. The provided contexts do not specify any dependent variables The provided contexts do not specify any independent

security.

reliability.

security.

storage.

data security.

security.

including mobile app development. [

security.

data storage.

data security.

data storage.

Mobile-specific consensus mechanisms for improved [

used in the study.

variables used in the study.

It identifies challenges like scalability, performance, and cost. [ [

[ [ [ [ 1 [

[ [ [

performance. 1

The study does not specify any datasets used.

A Blockchain-based Secure Android Data Storage (BSADS) 1 1

1 1 1 1 ]

1 1 1

1 Usability and user experience in blockchain mobile apps. ]

framework is proposed. ] ]

] ] ] ]

Scalability issues in Ethereum Name Service (ENS). ]

] ] ]

Scalability and performance solutions for data storage. Mobile-specific consensus mechanisms development.

Paper 8 The paper presents battery impact measurements of mobile PoW algorithms significantly impact smartphone battery life The paper measures mobile blockchain execution impact on PoW algorithms double battery discharge rate compared to The paper studies mobile blockchain's impact on smartphone A smartphone application was developed for battery metric The paper addresses mobile blockchain's impact on

PoW algorithms negatively impact smartphone battery life. Conceptualization by authors A.O., M.K., and S.B.

The dataset aids researchers in blockchain technology To measure battery impact of mobile blockchain execution on PoW algorithms significantly increase battery discharge rates. Lack of existing measurements for blockchain on resource- Investigating battery performance under different blockchain Battery discharge rate during blockchain execution.

Battery status without blockchain application running. Reference dataset: No blockchain application, screen on.

blockchain execution.

negatively.

smartphone battery.

PoA.

battery.

gathering.

smartphone battery. [

[ development.

smartphones. [

constrained devices.

consensus algorithms. [ [ [

It focuses on Proof-of-Work and Proof-of-Activity algorithms. [ [

Data was collected using a custom smartphone application. 1 1

[ [ [ [ 1

1 1 1 1 ]

1 [ [

] 1 1

1 [ [ 1 1 1

] 1 1 ] ] ]

Measurements include battery current, voltage, temperature, ] ]

] ] ] ]

Limited computational capabilities of smartphones compared Methodology developed by S.B. ]

] PoA algorithms have minimal impact on battery performance. ]

] Battery voltage levels during operation.

Battery status with PoA-based blockchain application. PoA dataset: Active PoA-based blockchain application

Paper 9 Development of a secure e-voting mobile application using The proposed system offers higher security than existing The paper discusses an efficient e-voting mobile application. A mobile app prototype for e-voting was created.

The paper focuses on developing an e-voting mobile Development of an Android mobile application for e-voting. Online voting allows electronic recording and submission of Users can vote multiple times.

The application ensures complete secrecy during elections. The application enhances e-voting security for users. To develop a user-friendly e-voting mobile application. An efficient e-voting mobile application was developed using The paper does not address scalability of the e-voting system. Improvements to address current limitations of the research. The provided contexts do not specify any dependent variables The provided contexts do not specify any independent

Android.

systems. [

[ application. [

ballots. [

[ [ [

Android.

Limited discussion on user privacy and data protection [

used in the study.

variables used in the study.

Application allows online voting anytime, anywhere for [

1 1 [

1 [ 1

1 1 1 [

measures. 1

The study does not specify any datasets used.

students. 1 ]

] 1 ] 1 ]

] ] ]

1 Lack of comprehensive testing results for the application. ]

Incorporates a three-step security process to prevent ]

It utilizes Android technology for user-friendly voting. The app includes three levels of security verification. ]

Utilization of Android Studio for application creation. ]

Requires the same device for voting.

Voters select candidates using a correct voting code. Users can vote anytime using mobile devices.

To implement a three-step security process for voting. ]

Insufficient exploration of potential system vulnerabilities. Faster reporting and publication of results.

Paper 10 The paper proposes a real-time e-voting system.

The proposed e-voting system is efficient and user-friendly. The paper presents a proposed e-voting system.

The system was tested in real time for SMS and Internet The paper discusses e-voting systems and their technological SMS voting method using mobile connections.

The paper references various studies on electronic voting Current technologies inadequately address security risks in The system allows voting via SMS using mobile connections. The e-voting system enhances voter convenience and To propose an e-voting system with obtained results. The paper presents an e-voting system with obtained results. The paper lacks detailed security analysis for Internet voting Feasibility of various Internet voting systems.

The efficiency of the e-voting system.

The provided contexts do not specify any independent

It utilizes both SMS and Internet-based voting methods. [ [

methods.

advancements. [

systems.

Internet voting. [

accessibility. [

[ systems. [

[ variables used in the study.

The system ensures one-time voting per voter. 1 1

It is designed for high usability in elections. ] ]

[ [ 1 [ [

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1 [ 1 1

] 1 ] ]

The study does not specify any datasets used.

The system was tested with 100 users successfully.

It minimizes ambiguities and recount needs in voting. It includes results obtained from the system's ]

] Internet voting through a dedicated website. ] ]

An Android application facilitates SMS voting process. ]

To improve technology in voting processes.

Voters can vote via SMS using mobile connections. ]

Security and privacy requirements for Internet voting The number of voters participating.

Paper 11 The paper proposes a blockchain-based e-voting system. The proposed system enhances e-voting security using The paper proposes an e-voting system using blockchain The registration module collects voter identity information The paper proposes a blockchain-based e-voting system. Blockchain technology for secure data transfer.

Paper [1] presents a reliable online voting system using Lack of privacy in electronic voting systems.

Proposed a method for user input as part of a vote.

The system enhances voting security using blockchain To propose a secure e-voting system using blockchain The paper proposes a blockchain-based e-voting system. Lack of comprehensive analysis on voter privacy issues. Enhancing voter privacy in e-voting systems.

The provided contexts do not specify any dependent variables The provided contexts do not specify any independent

It ensures secure data transfer between voters and candidates.

blockchain technology. [

technology. [

and images. [

[ 1

[ Aadhar ID. [

1 [ 1

[ technology.

1 [

technology. [

[ 1

Insufficient exploration of potential security vulnerabilities. Improving security against data manipulation. Limited discussion on scalability of the proposed system. Exploring decentralized networks for voting.

used in the study.

variables used in the study.

The study does not specify any datasets used.

Users' identities are verified through facial recognition. 1 1 1 ]

] 1 ]

] 1 1 ]

Need for user experience evaluation in real-world scenarios. Implementing smart contracts for user privacy.

The system prevents data manipulation and double- ] ]

] It addresses low voter turnout issues in various areas. Hashing using SHA algorithm for data integrity. ]

Potential for data stealing or manipulation.

Created a blockchain to track vote tallies securely. ]

] User input is treated as part of a vote.

Absence of comparative studies with existing voting systems. Evaluating cost-efficiency of blockchain voting systems.

Paper 12 The paper addresses scalable anonymous voting on Ethereum Three major bottlenecks in anonymous voting were

The paper addresses scalable anonymous voting on Ethereum The scheme reduces gas consumption to 1/53 of existing The paper addresses scalable anonymous voting on Ethereum Scalable anonymous voting on Ethereum blockchain. The paper identifies three major bottlenecks in blockchain Division overflow in encryption of voting values for

A scalable anonymous voting system for multiple candidates Identifies bottlenecks in anonymous voting on Ethereum To address bottlenecks in anonymous voting on Ethereum The paper identifies three major bottlenecks in voting Previous schemes lack scalability for multiple candidates and Exploring further optimizations for time complexity in voting The study does not specify dependent variables. The provided contexts do not specify any independent

blockchain.

Identifies three major implementation bottlenecks.

identified. [

blockchain. [

solutions. [

blockchain. [

[ 1

voting. [

anonymity. [

on Ethereum. [

blockchain. [

blockchain. [

implementation. [

voters. [

systems.

Investigating alternative solutions for tallying failures.

variables used in the study.

The study does not specify any datasets used.

Proposes algorithmic solutions to enhance scalability. 1 1

1 1 ]

1 1 1

1 1 1

1 Enhancing scalability for larger voter and candidate numbers.

Achieves significant gas reduction compared to existing ] ]

] ] Division problem solved using extended Euclidean algorithm. ] ]

] ] ]

] ] Developing more robust encryption methods for anonymity.

Paper 13 A blockchain-enabled online-voting system is proposed. Online voting systems can make elections cheaper and A blockchain-enabled online-voting system is proposed. The system allows secure online voting using blockchain The paper proposes a blockchain-enabled online-voting The paper proposes a decentralized voting platform using High security password checked before voting is allowed. The system is currently built for small organizations only. The paper proposes a blockchain-enabled online-voting Online voting systems can reduce election costs and time. To propose a blockchain-enabled online-voting system. A blockchain-enabled online-voting system is proposed. Future scalability for national voting systems is not Development of a national voting system using blockchain The provided contexts do not specify any dependent variables The provided contexts do not specify any independent

The system enhances security with authentication and quicker. [

technology.

system.

Blockchain technology. [ [

system. [

[ [ addressed.

technology.

variables used in the study.

authorization features. [ 1 [

[ [ 1 1 [

1 1 1

Limited focus on consortium blockchain advantages. [

The study does not specify any datasets used.

Unique identification keys and fingerprints are used for voter 1 ]

1 1 1 ] ]

1 ] ]

] Lack of extensive user testing and feedback. 1

verification. ]

The model is an android application with enhanced security ]

] ] Voter confirms vote transfer to correct candidate or party. Future development aims for a national voting system. ]

Enhances transparency in the democratic process.

To enhance security features in voting processes.

Enhanced security features include authentication and No analysis of potential hardware vulnerabilities. ]

Paper 14 Proposes a decentralized voting platform using Ethereum A decentralized voting platform based on Ethereum

The paper proposes a decentralized voting platform using The system is feasible for decentralized voting.

The paper proposes a decentralized voting platform using The paper proposes a decentralized voting platform using The paper reviews solutions integrating E-voting and Lack of data integrity and security protection measures. Enforces voting data immutability and integrity.

The platform restricts multiple votes per mobile number. To propose a decentralized voting platform using Blockchain A decentralized voting platform using Ethereum Blockchain Lack of data integrity and security protection measures. Enhancing eligibility for national government elections. The provided contexts do not specify any dependent variables The provided contexts do not specify any independent

Blockchain.

Blockchain is proposed.

Blockchain technology. [

Blockchain technology.

Blockchain technology.

Blockchain. [

[ [ technology.

was proposed. [ [

variables used in the study.

Ensures data integrity, transparency, and privacy for voters. [ [

1 [ [ [

1 1 1 [

[ 1 1

The study does not specify any datasets used.

Enforces one vote per mobile phone number. 1 1 ]

1 1 1 ]

] ] 1 1 ] ]

Addresses trust issues in conventional E-voting systems. ] ]

Voting registration takes 2 to 4 minutes. ]

] ] Single point of failure.

Ensures robustness and reliability of the voting system. It can facilitate national government elections with additional ]

] Single point of failure in existing systems.

Implementing fingerprint or special devices for voting.

Paper 15 The paper discusses blockchain-based e-voting systems. Blockchain technology enhances voting system efficiency and The paper discusses decentralized blockchain e-voting The paper proposes a decentralized blockchain e-voting The paper discusses decentralized blockchain e-voting Blockchain technology is utilized for decentralized e-voting. E-voting systems advanced over traditional methods, gaining E-voting systems are prone to hacking. The system enhances security and convenience in e-voting. Blockchain technology enhances voting system reliability and To develop a decentralized e-voting system using blockchain The proposed system enhances e-voting security and Lack of comprehensive security measures against hacking. Exploring enhanced security measures for blockchain e-voting The provided contexts do not specify any dependent variables The provided contexts do not specify any independent

It highlights advantages over traditional voting methods. security. Smart contracts enhance security and trust in voting. [

implementation. [

system. [

systems. [

[ 1

popularity globally. [

[ 1

[ precision.

1 [

technology. [

convenience. [

[ 1

systems.

Investigating user interface improvements for better voter

variables used in the study.

The study does not specify any datasets used.

Various tools were utilized for implementation. 1 1

1 1 ] 1 ]

] 1 1 1 ]

engagement.

The system aims to improve voter participation and ] ]

] ] Smart contracts govern communication and decisions in the ]

Inefficient auditing processes exist.

It utilizes blockchain technology for reliable and precise ]

] ] Inefficient auditing processes in current e-voting systems. Analyzing the impact of blockchain on election transparency.

Paper 16 The paper presents a decentralized e-voting application using Electronic voting systems can enhance early adoption in The paper presents a decentralized e-voting application using A proof-of-concept for e-voting application was developed. The paper presents a decentralized e-voting application using The solution uses blockchain technology for secure voting. Electronic voting systems can reduce costs and enhance Limited real implementations in embedded IoT area. Development of a decentralized e-voting application using Electronic voting systems can enhance democratic processes. To construct a decentralized e-voting application using A proof-of-concept e-voting application was developed using The paper does not explore scalability of the proposed Improving security using secure elements and post-quantum The provided contexts do not specify any dependent variables The provided contexts do not specify any independent

blockchain technology.

various areas.

blockchain technology. [

blockchain technology. [

security. [

blockchain technology. [

blockchain technology.

blockchain technology.

solution.

cryptography algorithms.

variables used in the study.

It ensures complete voter anonymity and end-to-end [ [

1 [ 1 [ 1 [

1 [ [

Limited discussion on potential vulnerabilities in the system. [

The study does not specify any datasets used.

security. 1 1 ]

1 ] 1 ]

1 ] 1

1 Lack of user experience evaluation for the voting application. 1

The solution features two major properties: privacy and ] ]

The application ensures complete voter anonymity and ]

Ethereum blockchain is the primary framework utilized. ]

Current solution primarily based on Ethereum blockchain. ]

Voter anonymity and security are ensured through blockchain ]

] No comparison with existing e-voting systems' performance ]

Paper 17 The paper proposes a blockchain-based e-voting model. The proposed e-voting model enhances security and The paper addresses flaws in current electoral systems. The paper proposes a blockchain-based e-voting model. The paper addresses flaws in current electoral systems. Blockchain technology is utilized for e-voting implementation. The paper addresses fairness and privacy in voting systems. The paper addresses limitations in existing voting systems. The paper proposes a blockchain-based e-voting model. The paper proposes a secure e-voting model using blockchain To address flaws in current electoral systems.

The paper proposes a blockchain-based e-voting model. The paper does not address large-scale election

Exploration of additional blockchain frameworks for e-voting The provided contexts do not specify any dependent variables The provided contexts do not specify any independent

It addresses issues like vote manipulation and hacking. transparency. [

[ [ [ [ [

[ technology. [

[ implementations.

systems.

variables used in the study.

The system ensures security, transparency, and [

1 1 1

1 1 1 1 [

1 1 Limited exploration of blockchain frameworks for diverse Enhancements in security measures for online voting

The study does not specify any datasets used.

cryptography. 1 ]

] ] ] ] ]

] 1 ]

] voting systems.

applications.

Admin manages elections and candidate listings. ]

It proposes a blockchain-based e-voting model.

It addresses issues like vote manipulation and database It proposes a blockchain-based e-voting model for security. Ethereum blockchain is employed for the proposed voting It evaluates blockchain applications for electronic voting It proposes a unique electronic legal voting system.

It addresses issues like vote manipulation and hacking. ]

To enhance security and transparency in voting.

It addresses issues like vote manipulation and hacking. Lack of user experience analysis for the proposed system. Investigation of scalability for larger elections using

Paper 18 The paper discusses e-voting using blockchain technology. A secure e-voting system enhances democracy and trust. The paper discusses e-voting using blockchain technology. The proposed scheme achieves end-to-end verifiability for e- The paper discusses e-voting using blockchain technology. Blockchain technology for decentralized e-voting system. Digital technology enhances lives but traditional voting is The centralized system poses security and transparency The paper proposes a decentralized e-voting system using The system enhances secure and trustworthy e-voting. To implement voting results using blockchain technology. Blockchain technology enhances security and transparency in The paper does not address scalability issues in e-voting Exploration of smart contract templates for e-voting systems. The provided contexts do not specify any dependent variables The provided contexts do not specify any independent

Blockchain enhances security and transparency in voting [ [

voting. [

[ paper-based.

threats.

blockchain technology. [

[ e-voting systems.

systems. [

variables used in the study.

systems. 1 1 [

1 1 [ [

[ 1 1 [

Lack of exploration on user interface design for voters. 1

The study does not specify any datasets used.

Traditional voting systems face risks of database tampering. ] ]

1 ] ]

1 1 1 ]

] 1 Insufficient analysis of potential cybersecurity threats to ]

Estonia pioneered electronic voting for national elections. Blockchain technology can reduce database manipulation Traditional voting systems face security and transparency ]

Traditional voting systems face security and transparency Use of hash trees for data verification. ] ]

] It reduces database manipulation and cheating in elections. To enhance security and transparency in e-voting systems. ]

blockchain voting.

Enhancing security measures in blockchain-based voting.

Paper 19 The paper presents an Ethereum-based electronic voting Ethereum was chosen for developing the online voting The paper addresses security concerns in online voting An Ethereum-based electronic voting system was developed. The paper addresses security concerns in online voting Implementation of an Ethereum-based electronic voting The provided contexts do not contain information regarding Future maintenance difficulties arise post smart contract The system minimizes costs and increases voter participation. The system enhances security in electronic voting. To develop a blockchain-based electronic voting system. A blockchain-based voting system enhances security and Future difficulties in smart contract maintenance are Propose methods for smart contract accessibility and The provided contexts do not specify any dependent variables The provided contexts do not specify any independent

system.

It addresses security concerns in online voting.

system. [

systems. [

[ 1

systems. [

system. [

the literature review of the paper.

deployment. [

[ 1

[ [ reliability.

1 1 [

anticipated. [

maintainability. [

variables used in the study.

The study does not specify any datasets used.

The system ensures transparency and confidentiality through 1 1 ] 1 1

1 ] ]

] 1 1 1

blockchain. ] ]

The system enhances safety and reliability of voting. ] ]

] It enhances safety and reliability of electronic voting. It ensures confidentiality and transparency in voting To enhance safety and reliability of electronic voting. ] ] ]

Paper 20 The paper discusses e-voting using blockchain technology. The paper reviews various electronic voting systems using The paper discusses an e-voting system using blockchain The paper presents a blockchain-based electronic voting The paper discusses electronic voting using blockchain The paper utilizes a blockchain empowered electronic voting The literature review included various research papers and The provided contexts do not mention any limitations related Introduction of a secure electronic voting system using The paper explores electronic voting systems using blockchain To establish a secure electronic voting system using

Blockchain technology enhances security and transparency in The paper lacks empirical data on user experience.

Exploration of enhanced security measures in blockchain The provided contexts do not specify any dependent variables The provided contexts do not specify any independent

It aims for secure and transparent voting processes. blockchain technology.

technology.

system.

technology.

framework.

books.

to the research paper.

blockchain technology.

technology.

blockchain technology.

voting systems.

Limited exploration of security vulnerabilities in blockchain voting systems.

variables used in the study.

Blockchain ensures votes are tamper-proof and anonymous. [ [

[ [ [ [

[ [ [

[ voting.

Development of user-friendly interfaces for voter

The study does not specify any datasets used.

The system allows real-time vote counting and result display. 1 1

It utilizes Ethereum and smart contracts for functionality. ] ]

1 1 1 1

] ] ] ]

1 1 1

] ] ]

1 Insufficient analysis of scalability issues in large elections. engagement.

] No comparison with traditional voting systems' effectiveness. Investigation of scalability issues in large-scale elections.

Paper 21 The paper presents a decentralized voting application using Traditional web applications are vulnerable to hacking. The submission represents original ideas and proper citations. The paper does not provide specific results. The paper discusses blockchain technology and its

Ethereum smart contracts execute business logic on the The paper includes a table of literatures referred.

The provided contexts do not mention any specific

Data is stored in blocks on a public ledger.

Decentralized applications enhance security in voting To develop a secure voting system using blockchain

The voting system is unhackable and tamper-proof.

The provided contexts do not mention any specific research The provided contexts do not contain information regarding The provided contexts do not specify any dependent variables The provided contexts do not specify any independent

Ethereum. [ [

It ensures secure and tamper-proof voting through 1 1

applications. [

blockchain. [

[ 1

limitations. [

1

processes. [

technology. [

To ensure votes are tamper-proof and unhackable. 1

gaps in the paper.

areas for future research.

variables used in the study.

The study does not specify any datasets used.

blockchain technology. ] ]

1 1 ]

] 1 To create a user-friendly interface for polls and elections. ]

The system features a user-friendly interface for polls and Decentralized applications (DAPP) can enhance security and Adherence to academic honesty and integrity is declared.

] ] Specific details of the literature review are not provided.

Nodes ensure transaction data integrity and permanence. ]

To assess technical feasibility and resource applicability for the It utilizes blockchain for secure vote storage and recording.

Paper 22 The paper proposes an online voting application using Blockchain enhances security and transparency in electronic The paper proposes an online voting application using The voting application successfully tracks votes for

The paper addresses issues in traditional voting methods. Utilizes Ethereum blockchain for secure e-voting.

The paper aims to secure e-voting using blockchain

Current architecture has security issues and selection The paper aims to secure online voting using blockchain Provides a secure electronic voting alternative using

To enhance security in the voting process using blockchain The application enhances security in online voting using Current architecture has security issues and lacks

Integration of Aadhaar framework with secure voting The provided contexts do not specify any dependent variables The provided contexts do not specify any independent

blockchain technology.

voting.

blockchain technology.

candidates. [

[ technology.

cancellations.

technology.

blockchain technology.

technology.

blockchain.

transparency.

applications.

variables used in the study.

It aims to enhance security and reduce tampering in voting. [ [

[ 1 1 [ [

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The study does not specify any datasets used.

Each vote is treated as a secure transaction. 1 1 1 ]

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Voters are uniquely identified by Aadhar numbers. ] ]

] It proposes an online voting system using blockchain Implements smart contracts for voter validation. ] ]

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] ] ]

Paper 23 The paper proposes a mobile voting framework using The framework enhances the voting process in Nigeria. The paper proposes a mobile voting framework.

The study presents a mobile voting framework using Voting is essential for democracy and consensus-based Utilization of blockchain technology for vote storage. The paper discusses previous m-voting techniques using Previous m-voting techniques used centralized databases, The framework ensures secure storage of casted votes. Enhances voting process transparency in Nigeria.

To propose a mobile voting framework using blockchain The proposed framework enhances mobile voting accessibility Lack of empirical testing of the proposed framework. Exploration of enhanced security measures for m-voting The provided contexts do not specify any dependent variables Blockchain technology for secure vote storage.

blockchain technology. [

It utilizes blockchain technology for secure vote storage. blockchain technology.

societies. [

centralized databases.

prone to attacks. [

[ technology.

and security.

Limited exploration of user experience in m-voting.

systems. [

It incorporates multi-factor authentication for voter 1

Multi-factor authentication verifies voter eligibility. [

[ 1 [ [

1 1 [

[ Insufficient analysis of potential security threats.

Investigation of user experience in mobile voting applications.

1 The study does not specify any datasets used.

verification. ]

Aims for accessible, secure, and transparent voting. 1 1 ]

1 1 ]

] 1 1

Need for scalability assessment of the blockchain solution. Assessment of blockchain scalability for large-scale elections. ]

The framework aims to secure and store casted votes. It improves transparency and regains voter trust.

Addresses issues of vote tampering and security. ]

] Implementation of multi-factor authentication for voter ] ]

It utilizes multi-factor authentication for voter verification. Increases voter turnout during elections. ]

] Absence of comparative studies with existing voting systems. Study of multi-factor authentication effectiveness in voting.

Multi-factor authentication for voter verification.

Paper 24 Voatz is the first internet voting app used in U.S. elections. Voatz has significant vulnerabilities affecting election integrity. Voatz allowed mobile voting in U.S. elections.

Voatz has vulnerabilities allowing vote alteration and Voatz is the first Internet voting app in U.S. elections. Cleanroom environment for security analysis.

The literature review describes security requirements in Voatz has vulnerabilities allowing vote alteration and The paper presents the first public security review of Voatz. Voatz's vulnerabilities threaten election integrity and voter To conduct a security analysis of the Voatz application. Voatz has significant vulnerabilities allowing vote

Lack of public source code for thorough security analysis. Usability concerns regarding ballot receipt discrepancies. The provided contexts do not specify any dependent variables The provided contexts do not specify any independent Aadhar information: phone number, age, name, photo,

Security analysis reveals significant vulnerabilities in Voatz's [ [

system. Adversaries can alter, stop, or expose user votes. 1 1

Voatz's privacy issues stem from third-party service usage. ] ]

exposure. [

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[ cryptographic voting systems.

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exposure. [

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privacy. [

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manipulation. [ [

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variables used in the study.

address. [

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Lack of transparency undermines election legitimacy and Lack of transparency exacerbates security and privacy risks. Security model lacks public formal description. ]

It targets overseas military and absentee voters.

Reverse engineering of Voatz's Android application. ] ]

It analyzes vulnerabilities exploitable by nation-state actors. ]

To identify vulnerabilities that could be exploited by ]

Incomplete documentation increases security and privacy Incentivizing voter participation in verification challenges. ]

Paper 25 The paper presents a decentralized e-voting application using Electronic voting systems can enhance early adoption in The paper presents a decentralized e-voting application using A proof-of-concept for e-voting application was developed. The paper presents a decentralized e-voting application using The solution uses blockchain technology for secure voting. Electronic voting systems can reduce costs and enhance Non-blockchain solutions are not suitable for real

Development of a decentralized e-voting application using Electronic voting systems can enhance democratic processes. To construct a decentralized e-voting application using A proof-of-concept e-voting application was developed. No external funding was reported for the research.

Improving security using secure elements and post-quantum The provided contexts do not specify any dependent variables The provided contexts do not specify any independent

blockchain technology.

various areas.

blockchain technology. [

blockchain technology. [

security.

implementations.

blockchain technology. [

blockchain technology. [

[ cryptography algorithms.

variables used in the study.

It ensures complete voter anonymity and end-to-end [ [

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The study does not specify any datasets used.

security. 1 1 ]

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The solution features two major properties: privacy and ] ]

The application ensures complete voter anonymity and ]

Ethereum blockchain is the primary framework utilized. ] ]

] Mobile and IoT technology facilitate e-voting adoption. ]

The solution ensures complete voter anonymity.

Limited testing on specialized devices for production ]

Paper 26 The paper proposes a secure e-voting system using

The system aims to eliminate traditional voting shortcomings. The paper proposes a decentralized national e-voting system. The website implements voting authentication and voting The paper discusses a secure e-voting system using

Blockchain technology for secure data storage.

The literature review discusses existing blockchain-based e- Scalability issues if all citizens vote simultaneously.

The paper proposes a decentralized national e-voting system. The system enhances secure access to voting for citizens. To create a secure and scalable voting environment. The system uses blockchain for secure voting data storage. Scalability issues if all citizens vote simultaneously.

Overcoming current system limitations with new

Voter's eligibility verification through Aadhar card ID. Aadhar card ID for voter identification.

blockchain technology. [ [

system profiles.

blockchain technology. [

voting systems. [

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[ [ technologies. [ [

It incorporates face recognition and mobile OTP for voter 1 1 [

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The study does not specify any datasets used.

authentication. ] ]

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The system ensures transparent and tamper-proof vote It provides secure access to voting for Indian citizens. It utilizes blockchain technology for secure data storage. ]

] Aadhaar card for user authentication. ]

Poor internet connectivity may hinder the voting process. It utilizes blockchain for secure and tamper-proof voting. It aims to eliminate traditional voting frauds and loopholes. To ensure transparency in the election process.

Deep learning algorithms match faces with Aadhaar card Internet connectivity may hinder the voting process. ]

OTP verification for phone number confirmation.

Phone number for OTP verification.

Paper 27 The paper discusses e-voting using blockchain technology. The voting system can be improved using blockchain The paper discusses e-voting as modern democracy's symbol. The paper proposes a secure online voting system using The paper discusses e-voting and its significance in modern Blockchain technology for secure voting transactions. Paper proposed an internet-based voting system with The paper does not mention specific limitations. Development of an online voting system using blockchain Blockchain technology enhances security in voting systems. To develop an online voting system using blockchain E-voting enhances voter turnout and accessibility. Limited focus on practical implementation of e-voting Exploration of advanced security measures for e-voting The provided contexts do not specify any dependent variables The provided contexts do not specify any independent

It aims to enhance voting security and accessibility.

technology. [

blockchain technology.

democracy. [

centralized server.

technology. [

technology. [

systems.

systems.

variables used in the study.

Blockchain ensures tamper-proof and decentralized voting [ 1 [

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1 [ Integration of biometric verification in blockchain voting.

The study does not specify any datasets used.

records. 1 ]

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1 Assessment of voter privacy in online voting.

Voter authentication is done via OTP and unique IDs. ]

It highlights issues with traditional physical voting methods. ]

] Smart contracts written in Solidity for voting logic. ]

] Online voting simplifies the election process for voters. ]

Blockchain ensures secure and tamper-proof voting ]

Development of user-friendly interfaces for e-voting

Paper 28 The paper presents an Ethereum-based electronic voting Ethereum was chosen for developing the online voting The paper discusses an Ethereum-based electronic voting An Ethereum-based voting system enhances security and The paper addresses security concerns in online voting Implementation of an Ethereum-based electronic voting The provided contexts do not contain information regarding Future maintenance difficulties after deploying smart The system minimizes costs and increases voter participation. The system enhances security in online voting.

To develop a decentralized electronic voting system using An Ethereum-based voting system enhances security and Future difficulties in smart contract maintenance are Propose methods for smart contract development

The provided contexts do not specify any dependent variables The provided contexts do not specify any independent

system.

system.

system.

reliability.

systems.

system.

the literature review of the paper.

contracts. [

[ blockchain technology.

reliability.

anticipated.

accessibility and maintainability.

variables used in the study.

It addresses security concerns in online voting. [

It addresses security concerns in online voting systems. [ [ [

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The study does not specify any datasets used.

The system ensures transparency and confidentiality through 1

Blockchain technology ensures transparency and 1 1 1

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blockchain technology. ]

confidentiality in voting. ] ] ]

] It enhances safety and reliability of electronic voting. It increases voter participation and turnout. ]

] ] ]

Paper 29 The paper discusses blockchain-based e-voting using The proposed smart contract successfully enables blockchain- The paper discusses blockchain's potential for secure e-voting A sample e-voting application was implemented on Ethereum. The paper discusses blockchain technology's potential Implementation of a smart contract on Ethereum blockchain. The project aims to provide a secure voting environment. E-voting lacks security and privacy in traditional elections. The paper proposes a secure e-voting system using E-voting can be securely implemented on the blockchain. To provide a secure voting environment using blockchain The paper proposes a blockchain-based e-voting system using Limited discussion on implementational aspects of e-voting Ethereum network's scalability needs further research. The provided contexts do not specify any dependent variables The provided contexts do not specify any independent

Ethereum.

based e-voting.

systems. [

beyond cryptocurrencies. [ [ [

blockchain. [

technology.

Ethereum.

systems. [

variables used in the study.

Smart contracts enhance security and transparency in voting. [ [

A sample e-voting application was implemented and tested. 1 1

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The study does not specify any datasets used.

Users can vote via Android or Ethereum wallets. ] ]

The application uses Ethereum wallets and Solidity language. ]

Use of Ethereum wallets for voting transactions.

E-voting can enhance public accessibility to administrative Usability and scalability issues in many e-voting attempts. ]

Addresses security issues of traditional e-voting systems. ]

] ] Anonymity for voters without compromising transparency is

Problem Statement Challenges Applications

Building a secure electronic voting system is challenging. Existing public e-voting systems are financially inefficient. Implementation of a blockchain-based electronic voting

[ [ system.

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Existing systems lack fairness, privacy, and transparency. High gas costs and limits affect smart contracts. ]

Current voting processes lack security and transparency. E-voting without security measures risks vote tampering. Secure electronic voting system using blockchain technology.

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Traditional voting systems are vulnerable to tampering. Ensuring voter anonymity while maintaining transparency is Voting process linked to transactions in the Bitcoin protocol.

Existing blockchain platforms lack built-in voting mechanisms. Ensuring determinism of smart contract execution. A native blockchain voting protocol for decentralized decision-

[ [ making.

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Decision-making relies on trusted parties or centralized Preserving privacy without a trusted party. Traditional paper-based voting systems face numerous issues. Traditional voting requires more time and paper.

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E-voting application for mobile devices.

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Problems include lost ballots and invalid votes.

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Loss of ballot papers and invalid votes occur.

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Authentication using OTP for secure voting.

Electronic voting protocols face practical application Complex tasks for election authorities in key generation and A smartphone application for election authorities.

challenges. [

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decryption. [

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Distributed key generation for elections.

Mobile commerce faces significant data security challenges. Mobile commerce faces data security problems. MobiChain for securing m-commerce transactions.

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Existing solutions lack efficiency for mobile devices. Effective security solutions are needed for m-commerce Mobile Blockchain Application Programming Interface (API)

The paper investigates data storage security for Android Limited storage capacity of mobile devices. Blockchain for Android mobile app data storage security.

mobile applications. [

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Scalability issues in public blockchain networks.

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Decentralized applications like Bitcoin and Ethereum.

Mobile blockchain projects negatively impact smartphone PoW algorithms negatively impact smartphone battery life. A smartphone application for battery metric gathering.

battery life. [ [

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] High computational load affects user experience on mobile PoW-based blockchain applications (MIB and uPlexa

E-voting systems face security vulnerabilities and phishing Phishing attacks target personal information and data. Development of an e-voting mobile application using Android.

attacks. [ [

[ 1 1

1 ] ]

] Complicated verification methods hinder user experience. Online voting system for students.

The paper addresses vulnerabilities in current voting systems. Security risks in remote Internet voting systems. Internet-based voting system through a website.

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It highlights issues of reliability and security in Internet voting. Inadequate current technologies to address voting security SMS-based voting system using mobile connections.

The paper addresses flaws in e-voting systems. [

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Lack of privacy in electronic voting systems. [

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E-voting system using blockchain technology for secure voting.

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Issues include lack of privacy and data manipulation. Data stealing or manipulation from untrusted sources. ]

The paper addresses scalable anonymous voting on Ethereum Division overflow in encryption of voting values. Scalable anonymous voting on the Ethereum blockchain.

blockchain. [

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Large time complexity in tallying votes.

The paper investigates issues in current voting systems. Trust issues in the electoral system are prevalent. Blockchain-enabled online voting system for enhanced

[ [ security.

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Problems include vote rigging and election manipulation. Vote rigging and election manipulation are major concerns. ]

Voting results are often questioned in centralized systems. Lack of data integrity and security protection measures. Decentralized voting platform using Ethereum Blockchain.

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Trust issues arise from organizing authorities in elections. Single point of failure in centralized systems. Mobile application for voter registration and voting.

Current e-voting systems are prone to hacking. [

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Inefficient auditing affects accurate election results.

Prone to hacking. [

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Inefficient auditing.

Decentralized blockchain e-voting system. [

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User interface for voting using NetVote.

The need for secure and anonymous electronic voting Cybersecurity challenges in electronic voting systems are A decentralized e-voting application using blockchain

systems.

highlighted.

technology.

Existing solutions lack complete voter anonymity and [ [

security. 1 1

Corrupt authorities can manipulate vote counting processes. ] ]

Current electoral systems lack trust and security. [

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Lack of trust in current electoral systems. [

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Proposed e-voting model using blockchain technology. [

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Issues include vote manipulation and database hacking. Vote manipulation and central database hacking. Distributed electronic voting systems based on blockchain.

Traditional electoral systems face security and transparency Security and transparency issues in conventional electoral E-voting using blockchain technology for secure elections.

issues. [

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systems. [

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Visual cryptography for voter authentication and privacy.

Current online voting systems pose security concerns. Future maintenance difficulties of deployed smart contracts. Development of an Ethereum-based electronic voting system.

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Offline voting incurs significantly higher costs.

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Ensuring confidentiality of vote content and results.

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Implementation of smart contracts for voting processes.

Traditional voting processes face issues like vote disruption Vote disruption during the voting process. Electronic voting system using blockchain technology.

and low turnout. [

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Low voter turnout in elections.

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Smart contracts for managing election processes.

The voting system in India is flawed and easily manipulated. The voting system is flawed and easily manipulated. A decentralized voting system using blockchain technology.

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Wealthy individuals can buy votes or tamper with machines. Users must pay transaction fees to record votes. Online web application for secure polling and elections.

Voting is currently done physically at booths. Current electronic voting lacks auditability and transparency. Online voting application using Ethereum blockchain

[ [ technology.

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Physical voting lacks security and is prone to tampering. Expensive and labor-intensive setup is required. ]

Mobile voting faces issues of vote tampering and security. Centralized databases are susceptible to DDoS attacks. Mobile voting (m-voting) for secure electoral processes.

[ [ [

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Centralized databases are vulnerable to DDoS attacks and Tampering by malicious insiders or administrators is a risk. Blockchain technology for tamper-proof vote storage. Voatz has significant security vulnerabilities affecting election Voatz has vulnerabilities allowing vote alteration and Voatz: A mobile voting application used in U.S. elections.

integrity.

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exposure. [

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The paper addresses secure and anonymous electronic Cybersecurity challenges in electronic voting systems are E-voting application using IoT embedded devices.

voting. [

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highlighted. [

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Electronic voting in university environments.

Traditional voting systems are prone to tampering and fraud. Scalability issues if all citizens vote simultaneously. Secure e-voting system using blockchain technology.

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Existing systems lack robust user authentication and Poor internet connectivity may hinder the voting process. User authentication via Aadhaar card and OTP verification.

Traditional voting methods are prone to manipulation and The paper does not specify particular challenges. E-voting systems using blockchain technology.

fraud. [

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It discusses blockchain's decentralized transaction [

capabilities. 1

Challenges may relate to implementation in various sectors. ]

No detailed challenges are outlined in the provided contexts. Electronic Voting Machines (EVMs) for elections.

Current online voting systems pose security concerns. Future maintenance difficulties of deployed smart contracts. Development of an Ethereum-based electronic voting system.

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Offline voting incurs significantly higher costs.

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Ensuring confidentiality of vote content and results.

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Implementation of secure voting details storage in blockchain.

Legacy voting systems raise reliability and transparency E-voting lacks security and privacy features of traditional E-voting systems using Ethereum blockchain.

concerns. [

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elections. [

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Smart contracts for administrative operations.