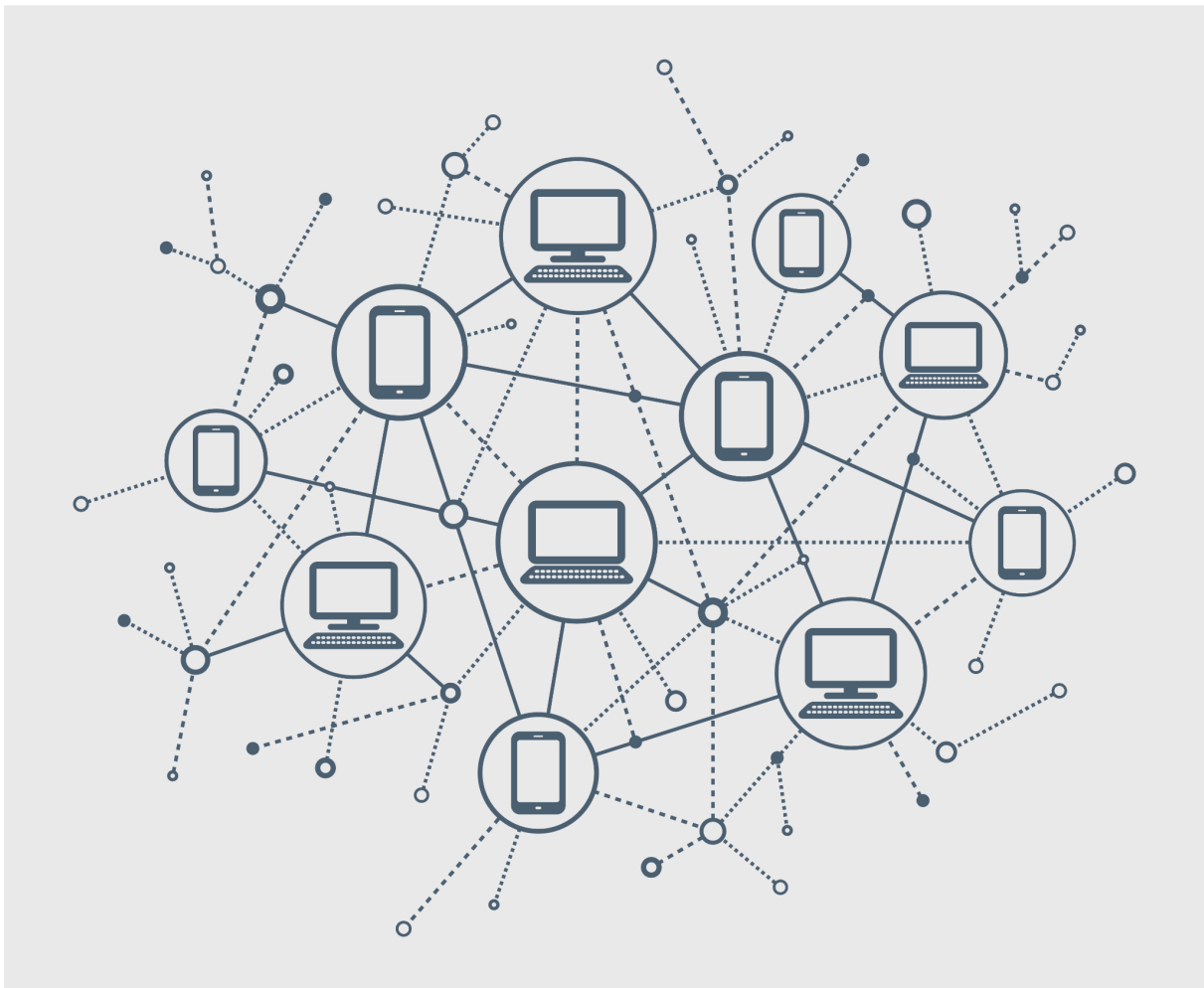


Instareview

A decentralized review system that allows for an immutable and honest way to view and post reviews



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Executive Summary

Instareview, our decentralized review system, is a revolutionary way to provide trustworthy and unbiased reviews of products and services. Traditional review systems are often plagued by biased reviews and fake ratings, leading to consumer mistrust and, more importantly, dissatisfaction. Instareview addresses these issues by leveraging blockchain technology to create an immutable and transparent system.

Our system is decentralized, meaning that it does not rely on a central authority to verify reviews. Instead, reviews are verified by a network of nodes on the blockchain, ensuring that no single entity can manipulate the system. The use of smart contracts further enhances transparency and reliability, as the terms of the contract are enforced by the blockchain.

The system benefits both consumers and businesses. Consumers can trust that the reviews they are reading are authentic and unbiased, while businesses can both leverage both the positive reviews to build their reputation and increase sales, and the negative reviews as authentic constructive criticism . Our system is easy to use and accessible to all, making it a powerful tool for improving customer satisfaction.

In conclusion, the decentralized review system is a game-changer for the review industry. Its use of blockchain technology ensures that reviews are trustworthy, unbiased, and transparent. The system benefits everyone, making it a powerful tool for improving customer satisfaction.

Introduction

The traditional review system, in which a centralized authority controls and manages all reviews, has been widely criticized for its lack of transparency and susceptibility to manipulation. To address these issues, a decentralized review system has emerged as a promising alternative. In a decentralized review system, reviews are submitted and validated by a network of independent validators, ensuring that the reviews are authentic and unbiased.

The purpose of this white paper is to provide an in-depth analysis of the decentralized review system and its potential impact on the online review industry. We will discuss the key features of the system, its advantages over traditional review systems, and its potential limitations. Additionally, we will explore the technical aspects of the system, including its underlying blockchain technology and smart contract architecture.

Overall, this white paper aims to inform and educate readers about the decentralized review system and its potential to revolutionize the way reviews are conducted online.

Background

With an exponentially increasing number of people shopping online, customers are solely relying on reviews to decide their purchase for them, making it the only way in which a customer can receive information on a product without having to physically see it. However, the customer has to put full trust in the review, whether it is honest or not. There are also reviews that are being removed by payment to the seller from the distributor. If you look up “can businesses pay to remove reviews”, the fetched results will be actual companies that provide negative review removal services. This means that there are companies that are actually taking payment to remove negative reviews that have about a 70% chance of being honest. The following is proof of a need for reform.

Supporting Evidence

“About 99.9% of customers read reviews when they shop online.”

-PowerReviews, 2022

“About 42% out of 720 million reviews on Amazon are fake or unreliable.”

-FOX17, 2022

“About 30% of all online reviews are fake.”

-CBS Austin, 2022

“I think there is a serious problem. My sense is that many customers who are not expert are being led astray by [fake reviews]”

- Professor Raji Srinivasan, McCombs School of Business

“The reviews are so critical in making and influencing decisions that we need to be protecting consumers”

-Zarina Stanford, Chief Marketing Officer at Bazaarvoice

Solutions

The current solutions for limiting fake reviews is through spam filters and user reporting. Spam filters essentially use NLP and hate speech detection to flag and remove dishonest reviews. This has had some effectiveness, but based on the

previous evidence, it is still not enough. What all these review systems are missing is immutability. Instareview takes care of that by using blockchain technology to assign cryptographic hashes to the reviews. The main advantage of a hash is that it cannot be reverse-engineered, therefore making the review unchangeable. It will be expanded upon further in the analysis section, but the current beta for Instareview has already adopted the immutability factor, making it the most advanced and secure review system.

Analysis

In this section, we will dive deeper into the topic of decentralized review systems and analyze the potential benefits and challenges associated with this technology.

Benefits: One of the primary benefits of a decentralized review system is its ability to create a transparent and trustless environment for reviews. By leveraging blockchain technology, users can verify the authenticity of reviews, ensuring that they are not manipulated or censored. Additionally, decentralized systems allow for greater privacy and security, protecting user data from third-party companies or hackers. Another potential benefit of a decentralized review system is its ability to create a more fair and equal system. In traditional review platforms, businesses with larger budgets can often manipulate reviews through paid promotion or fake reviews. Decentralized systems eliminate these barriers, allowing for honest and unbiased reviews from a diverse range of users.

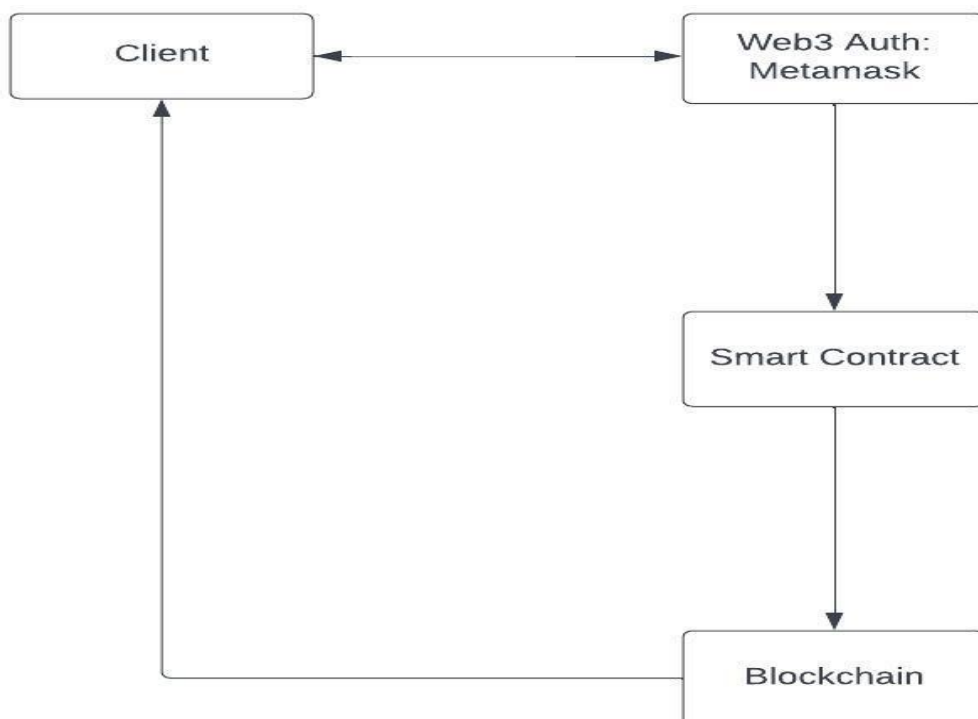
Challenges: While decentralized review systems offer many benefits, they also face a number of challenges. One major challenge is the lack of adoption and familiarity with blockchain technology. Many users may be hesitant to use a decentralized platform due to a lack of understanding or trust in the technology.

Additionally, decentralized systems may face scalability issues as they grow in popularity. The current infrastructure of blockchain technology may not be able to handle the large number of transactions required for a popular review platform. This could lead to slower transaction times and higher fees, making it less accessible for users.

Overall, decentralized review systems offer a promising solution to many of the challenges faced by traditional review platforms. While there are still challenges to be addressed, the potential benefits of decentralized systems make it a technology worth exploring further. In the next section, we will discuss our website and tech stack.

Technical Information

Diagram



The Tech Stack

Ganache: Ganache is used to run a local testnet. Here we can deploy developed contracts and applications. Also, we can control and inspect the blockchain operations.

Truffle: This is used as a development environment and testing framework used with Ganache.

Metamask: Metamask helps run Decentralized applications right into our browser (assuming browser extension is installed). It is a virtual wallet that stores ethereum and it used to pay for gas fees. This will act as a bridge between the client and the blockchain.

Solidity: Solidity is an object-oriented programming language for implementing smart contracts on various blockchain platforms, most notably, Ethereum.

Instareview's smart contract is a simple one that has only 2 functions: add review, and get review by index (for searching).

Blockchain: It is a digital and distributed ledger which maintains all the reviews in the blocks. Once the data is written to blocks, it is impossible to modify or delete them, therefore creating immutability.

Transaction: As the blockchain works and runs using transactional codes, it uses the Ethereum platform to execute transactions. The term transaction, when used in Ethereum context, is interpreted as data that stores and sends from one externally owned account to another account, in this case it is in the form of a smart contract on the blockchain.

Mainnet Price Analysis

This is an analysis of what the price would look like given a gas price range of 80-90 Gwei.

Gas used: 136888 gas

Gas price: 80-90 Gwei

Total cost (ETH): 0.01095024 - 0.01231992

Total cost (USD): \$20.08 - \$22.60

I included a range for gas price because it varies, given the volatile nature of crypto. Current gas prices can be found on ETH gas station.

Conclusion

In conclusion, the decentralized review system has the potential to revolutionize the way reviews are conducted online. By leveraging the transparency and security of blockchain technology, this system can provide a trustworthy and reliable platform for users to share their opinions and experiences. Our analysis has shown that this system can address the major issues with centralized review systems, such as fake reviews and censorship. Moreover, it can also incentivize users to contribute high-quality reviews through the use of a token economy.

While there are still challenges to be overcome, such as integrating a spam/hate speech filter and the issue of adoption and integration with existing platforms, we believe that the benefits of this system make it a worthwhile pursuit. We hope that this white paper has provided valuable insights into the potential of the decentralized review system, and we look forward to seeing it develop in the future.

