

Rariko

Create. Socialize. Own.

Abstract

RariKo, a decentralized social graph protocol built on Ethereum, aims to revolutionize the social media landscape by addressing these issues. It offers a platform where each user's identity is minted as a Non-Fungible Token (NFT), and all social data, such as followers, following, and posts, are stored on the NFT Metadata URI. This innovative approach ensures user ownership, data privacy, and trustless account recovery, unlocking a new level of interoperability in the social media space.

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History

For decades, the media industry has been around with traditional legacy systems and business models running the distribution game.

However, since the digitization of content, only a few players have managed to keep up and dominate the market. Their monopoly in the space has led them to squeeze profits from content creators, creating much dissent in the industry. Considering the extent of the imbalance in the system, it seems like only a decentralized digital platform like the blockchain can even scale to ensure fair distribution and profit-sharing.

How is Blockchain making a difference in the current setup?

1. Disintermediation of content

Intermediaries in the social media industry take most of the profits, resulting in the original content creators being compensated unfairly. The decentralized nature of the blockchain allows content creators to distribute their work directly, ensuring that they receive their due profits without intermediaries grabbing a chunk.

2. Direct and secure monetization of assets

Smart contracts on the blockchain help manage and enforce copyright terms without the extra cost and hassle of expensive legal intermediate parties. Therefore, creators can be completely sure that they will receive the profit proceeds fairly each time their copyrighted content is shared or distributed.

3. Efficient peer-to-peer distribution with micropayment options

Most content aggregators require users to purchase monthly or annual subscriptions to access advertising and media content. However, many users would prefer a pay-per-use model for its affordability and convenience. The blockchain keeps a record of every instance of content access, implying that once a content creator does something, or in layman's terms, registers his/her content on a blockchain platform, they need not worry about keeping track of consumption manually or through an intermediary. Blockchain's efficient, time-logged tracking system allows creators to offer real-time, flexible, and transparent consumption-based pricing mechanisms like metered billing. With smart contracts on the blockchain, automatic micropayments can be executed securely between the consumer and the creator.

Introduction

Almost a decade and a half ago, there was a huge push toward internet commerce and social media which seems fair, given how the internet and social media have changed the way people connect and interact with each other.

With the birth of Bitcoin back in 2009, a new revolution started to take stride over the last few years with people believing in the power and benefits of decentralization.

Currently, there are around 300 Million crypto users around the globe, equivalent to almost 6 percent of all smartphone users.

Rariko envisions catalyzing the onboarding process for the first billion users to Web3.0 as the only way to do it is through socializing the next generation of the internet and solving the user problems that are still not addressed at the core level.

With growing market demand, user-generated content has created billions of dollars worth of value for the shareholders of social media giants, such as Reddit, Twitter, Facebook, and Telegram to name a few. We aim to support the current Web3 communities by returning much of this content's value to the people who provide valuable contributions through activity based rewards model..

Recognizing Contributions

Rariko is designed from the ground up to address the major barriers to the adoption and monetization of a social media-based economy. Our thesis is that the same techniques used to grow major social media platforms can be used to bootstrap a scalable Blockchain based messaging protocol. Economic incentives enabled by tokenization can dramatically facilitate the growth of a new social media platform. It is the synergy between wallet infrastructure and social media that we believe may give Rariko a powerful advantage in the market.

The challenge faced by us is deriving an algorithm for scoring individual contributions that most community members consider to be a fair assessment of the subjective value of each contribution. In a perfect world, community members would cooperate to rate each other's contributions and derive fair compensation. In the real world, algorithms must be designed in such a manner that they are resistant to intentional manipulation for profit. Any widespread abuse of the scoring system could cause community members to lose faith in the perceived fairness of the economic system.

Existing platforms operate on a one-user, one-vote principle. This creates an environment where rankings can be manipulated by sybil attacks and the service providers must proactively identify and block abusers. People already attempt to manipulate the Reddit, Discord, and Twitter with fake users and bots when the only reward is traffic or engagement be it authentic or artificial..

Challenges

The current landscape of social media is dominated by centralized platforms that control user data, dictate content policies, and have the power to censor or de-platform users at will. This centralized control has led to a multitude of problems that RariKo aims to address:

1. **Data Ownership and Privacy:** In traditional social media platforms, user data is owned and controlled by the platform. Users have little to no control over how their data is used, who it is shared with, or how it is monetized. This lack of control and transparency raises significant privacy concerns.
2. **Censorship and De-platforming:** Centralized platforms have the power to censor content and de-platform users based on their content policies. This power can be, and has been, misused, leading to unjust censorship and suppression of free speech.
3. **Lack of Interoperability:** Each social media platform operates in its own silo, with its own set of rules and data formats. This lack of interoperability makes it difficult for users to move their social graph (i.e., their network of connections) between platforms.
4. **Account Recovery:** In the event of a lost password or hacked account, users are reliant on the platform's account recovery process, which can be cumbersome and insecure.
5. **Centralized Content Moderation:** Content moderation on centralized platforms is often opaque and inconsistent, leading to accusations of bias and unfair treatment.
6. **Lack of Economic Incentives for Users:** Despite generating valuable content and data, users on traditional social media platforms do not receive a fair share of the economic value they create.

These problems highlight the need for a new approach to social media, one that prioritizes user ownership, data privacy, and decentralization. In the next section, we will discuss how RariKo addresses these issues and provides a robust solution for the future of social media.

Why User Censorship on Social Platforms Should be Decentralized

The issue of censorship on social platforms has been a topic of heated debate in recent years. Centralized social media platforms have the power to control the narrative, decide what content is acceptable, and who gets to participate in the conversation. This power has led to instances of perceived bias, unfair censorship, and de-platforming, raising concerns about freedom of speech and expression.

Decentralizing censorship on social platforms is a potential solution to these problems. Here's why:

- 1. Promotes Freedom of Speech:** In a decentralized social media platform, no single entity has the power to control or censor content. This promotes freedom of speech and allows for a more diverse range of voices to be heard.
- 2. Prevents Unfair De-platforming:** Decentralization ensures that the decision to de-platform a user isn't in the hands of a single centralized authority. This can prevent instances of unfair de-platforming based on political bias or other controversial reasons.
- 3. Transparent Content Moderation:** Decentralized platforms can leverage the power of the community for content moderation. This can lead to more transparent and fair content moderation practices.
- 4. User Empowerment:** Decentralization gives users more control over their data and their presence on the platform. They can decide what content they want to see and who they want to interact with.
- 5. Resilience to Manipulation:** A decentralized system is more resilient to manipulation or control by external entities. This can lead to a more authentic and organic social media experience.

However, it's important to note that decentralization isn't a magic bullet that will solve all the issues related to censorship and content moderation. It comes with its own set of challenges, such as dealing with harmful or illegal content. In the next section, we will discuss how RariKo addresses these challenges and provides a balanced approach to content moderation.

Solution We Have at RariKo

RariKo is designed to address the problems inherent in traditional social media platforms by leveraging the power of blockchain technology. Here's how RariKo provides solutions to the problems outlined above:

1. User Ownership and Data Privacy: At RariKo, each user's identity is minted as a non-fungible token (NFT), and all their social data, including followers, following, and posts, are stored on the NFT Metadata URI. This means that users have complete ownership and control over their data. They decide how their data is used and who can access it.

2. Decentralized Censorship and De-platforming: RariKo is a decentralized platform where no single entity has the power to censor content or de-platform users. This ensures that all voices can be heard and that the power of content moderation is in the hands of the community.

3. Interoperability: RariKo is built on the Ethereum blockchain, which allows for seamless interoperability with other decentralized applications (dApps) and platforms. Users can easily move their social graph between different platforms.

4. Trustless Account Recovery: In the event of a lost password or hacked account, users can recover their account in a trustless manner, without relying on a centralized authority.

5. Decentralized Content Moderation: RariKo uses AI models to filter out potential hate speech and then puts a proposal to the RariKo DAO (Decentralized Autonomous Organization) to decide whether to ban the content. This ensures a fair and transparent content moderation process.

6. Economic Incentives for Users: RariKo provides economic incentives for users by allowing them to monetize their content and data. Users receive a fair share of the economic value they create.

By addressing these issues, RariKo is paving the way for a new era of social media that is user-centric, transparent, and fair. In the next section, we will discuss why RariKo is positioned to be the next wave of social media.

How is RariKo Positioned to be the Next Wave of Social Media

RariKo is not just a social media platform; it's a revolution in the way we perceive and interact with social networks. Here's why RariKo is positioned to be the next wave of social media:

1. **User-Centric Approach:** RariKo puts users at the center of the social media experience. By giving users ownership of their data and control over their social interactions, RariKo is shifting the power dynamics in the social media landscape.

2. **Interoperability and Cross-Chain Compatibility:** Built on Ethereum, RariKo is inherently interoperable with other dApps and platforms in the Ethereum ecosystem. Moreover, the protocol is designed to be multi-chain, allowing users to link their wallets across different blockchains. This cross-chain compatibility is a significant advantage in the increasingly fragmented blockchain space.

3. **Decentralized Autonomous Organization (DAO):** RariKo's governance is handled by a DAO, ensuring that decisions about the platform's future are made democratically by the community. This decentralized governance model aligns with the ethos of the blockchain community and ensures that RariKo remains a platform for the users, by the users.

4. **Innovative Use Cases:** RariKo's unique architecture opens up a plethora of innovative use cases. From social media apps to DeFi no-collateral loans, Metaverse experiences, and wallet-less login on web3 dApps using RariKo SDK, the possibilities are endless.

5. **Decentralized Content Moderation:** RariKo's approach to content moderation, which combines AI models and community governance, is a pioneering solution to one of the most challenging problems in social media today.

6. **Scalability and Efficiency:** By leveraging the power of blockchain technology, RariKo can handle a large number of users and transactions efficiently, making it a scalable solution for the future of social media.

In the next section, we will delve deeper into the technical aspects of RariKo, exploring the smart contract architecture that powers this innovative social graph protocol.

Smart Contract Architecture

RariKo's smart contract architecture is the backbone of its decentralized social graph protocol. It is designed to ensure user ownership, interoperability, trustless account recovery, and data privacy. Here's an overview of the key components of RariKo's smart contract architecture:

1. **ERC721 Standard:** RariKo uses the ERC721 standard for minting unique user identities as non-fungible tokens (NFTs). This standard ensures that each user's identity is unique and owned by them.
2. **User Wallets:** Each user's linked addresses and default address are stored in a struct called `userWallets`. This allows users to link multiple wallets across different blockchains to their RariKo identity.
3. **Mappings:** RariKo uses several mappings to keep track of relationships between users, their identities, and their wallets. These mappings include `tokenIdToUsername`, `usernameToDId`, `addressToTokenId`, `addressToDId`, `DIdToUserWallets`, and `userNameTaken`.
4. **Minting and Burning:** The `mint` function allows users to create a new identity by minting an NFT. The `burn` function, which can only be called by the contract owner, allows for the destruction of NFTs.
5. **Transfer Handler:** The `transferHandler` function ensures that when a user's NFT is transferred, the associated data (like linked addresses and default address) is also transferred to the new owner.
6. **Decentralized Identifier (DId):** Each user is assigned a unique DId, which is used to set a unique identity to each wallet group. This DId is used in various mappings to link user identities, wallets, and social data.
7. **Content Moderation:** RariKo's smart contract includes mechanisms for decentralized content moderation. It uses AI models to filter out potential hate speech and then puts a proposal to the RariKo DAO to decide whether to ban the content.
8. **Withdrawal:** The contract includes a `withdrawal` function that allows the contract owner to withdraw any Ether held in the contract.

This smart contract architecture allows RariKo to provide a decentralized, user-centric social media experience. In the next section, we will discuss RariKo's approach to decentralized content moderation.

Decentralized Content Moderation

One of the most significant challenges in the realm of social media is content moderation. Traditional social media platforms have been criticized for their opaque and often controversial content moderation policies. RariKo, with its decentralized approach, aims to address these issues head-on.

RariKo's content moderation model is a blend of artificial intelligence and community governance. Here's how it works:

1. **AI Filtering:** RariKo uses advanced AI models, like GPT, to filter out potential hate speech or harmful content. This AI model acts as the first line of defense, automatically scanning and flagging content that may violate RariKo's community guidelines.
2. **Community Governance:** Once the AI model flags a piece of content, a proposal is put forth to the RariKo DAO. The DAO, which consists of RariKo users, then votes on whether to ban the content. This process ensures that the final decision on content moderation is made democratically by the community.
3. **Transparency:** All content moderation actions are recorded on the blockchain, ensuring complete transparency. Users can trace the decision-making process for each moderated content piece, fostering trust in the system.
4. **Appeals:** Users have the right to appeal moderation decisions. The appeals are also handled by the DAO, ensuring a fair and unbiased review process.

This decentralized content moderation model is a significant departure from traditional social media platforms, where content moderation decisions are often made unilaterally by the platform. By involving the community in the decision-making process, RariKo ensures that its content moderation policies are fair, transparent, and aligned with the community's values.

In the next and final section, we will wrap up our discussion on RariKo and its potential to revolutionize the social media landscape.

Conclusion

The advent of blockchain technology has opened up a new frontier in the realm of social media, offering the potential to address many of the issues that have plagued traditional platforms. RariKo, with its innovative decentralized social graph protocol, is at the forefront of this revolution.

RariKo's unique approach to user identity, data ownership, interoperability, and content moderation sets it apart from traditional social media platforms. By minting each user's identity as an NFT and storing social data on the NFT Metadata URI, RariKo ensures that users have complete control over their online identities and data. The ability to link multiple wallets across different blockchains further enhances interoperability and user convenience.

The decentralized content moderation model, which combines AI filtering with community governance, ensures that content moderation decisions are transparent, fair, and aligned with the community's values. This is a significant departure from traditional platforms, where content moderation decisions are often opaque and controversial.

Furthermore, RariKo's smart contract architecture, built on the Ethereum blockchain, provides a robust and secure foundation for the platform. The use of ERC721 standard for minting user identities as NFTs, the mapping of relationships between users, their identities, and their wallets, and the mechanisms for minting, burning, and transferring NFTs, all contribute to the platform's robustness and security.

In conclusion, RariKo represents a significant step forward in the evolution of social media. By leveraging blockchain technology, it offers a user-centric, transparent, and decentralized alternative to traditional platforms. As the world continues to embrace decentralization and blockchain technology, RariKo is well-positioned to lead the next wave of social media.