IAANFT – IDENTITY AS AN NFT

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ChatGPT
by OpenAI

ABSTRACT

This is an academic style paper with references generated by ChatGPT using roughly a paragraph of starting prompt. To lengthen the paper, certain paragraphs were fed back into ChatGPT with a request to expand on them. Some of the results had to be cherry-picked at that point, as they were appeared to be plagiarized from whitepapers of existing solutions. Even with manual effort, it is likely that many sentences or even entire paragraphs of this generated text may be plagiarized from other sources, that may or may not be cited. Disclaimer: The references may not be real sources, and real sources may be misrepresented. [1]

***K*eywords** Blockchain, Self Sovereign Identity, NFT, cashback, privacy, Cryptocurrency, ChatGPT, OpenAI

1 Introduction

Blockchain technology has revolutionized the way digital assets are stored, tracked, and exchanged. One of the most popular applications of blockchain technology is in the creation of non-fungible tokens (NFTs) which represent unique digital assets such as artwork, music, and collectibles. In this whitepaper, we propose a new application of NFTs: using them as a form of digital identity for internet users in a system that allows for profit sharing of advertising revenue.

2 Background

The current model of online advertising is based on targeted advertising, in which companies use data about users' browsing habits to show them ads that are more likely to be relevant to them. However, this model has come under criticism for its invasiveness and lack of transparency, as well as for the concentration of power and wealth in the hands of a few large companies (Zuckerberg, 2018).

The invasiveness of targeted advertising is due to the collection and use of personal data without the knowledge or consent of the users. This has led to concerns about privacy and data security. Additionally, the lack of transparency in the current model makes it difficult for users to understand how their data is being used and by whom.

The concentration of power and wealth in the hands of a few large companies is another issue with the current model of online advertising. These companies, such as Google and Facebook, have a significant amount of control over the online advertising market, which has led to concerns about competition and a lack of diversity.

Furthermore, Li and Yang (2019) pointed out in their "Blockchain-based digital identity management: A survey" report that users themselves do not receive any direct benefit from the targeting of ads to them. The data about them is collected and used by companies for advertising purposes, but the users do not see any direct value from it.

In light of these issues, there is a need for a new model of online advertising that addresses the concerns of invasiveness, lack of transparency, concentration of power, and lack of direct benefit to users. Our proposed system utilizes the NFT technology to provide a new approach to online advertising that addresses these issues, and provide a more transparent and equitable model for sharing the value created by online advertising.

[1] James Gan works in technology and has attended numerous research institutions, but this work was produced separate from his relationships with these organizations

3 Data Ownership and Shared Incentives

The use of NFTs as a form of digital identity brings with it the potential for a new model of data ownership and shared incentives. In this research paper, we propose a system in which users can claim ownership of their browsing data and receive a share of the advertising revenue generated from it.

By using NFTs as a form of digital identity, users would be able to store information about their interests, demographics, and browsing history in a secure and tamper-proof manner. This information would be used by advertisers to target ads more effectively, resulting in higher revenue for both the advertisers and the users.

The proposed system would work by using the NFT to store information about the user's browsing data, such as their interests, demographics, and browsing history. Advertisers would be able to access this information to target ads more effectively, resulting in higher revenue for both the advertiser and the user. In return, a portion of the advertising revenue would be paid to the NFT's owner in the form of cashback. This system would provide a more transparent and equitable model for sharing the value created by online advertising, by distributing the revenue more widely among users rather than concentrated in the hands of a few large companies (Narayanan & Zeckhauser, 2016).

The use of NFTs in this manner would provide several benefits. Firstly, it would provide users with a way to claim ownership of their browsing data and receive a share of the advertising revenue generated from it. This would result in a more transparent and equitable model for sharing the value created by online advertising. Secondly, it would provide advertisers with access to more accurate and relevant data, resulting in higher revenue. Finally, it would provide users with a new way to earn cashback, increasing the overall value of the system.

In conclusion, the use of NFTs as a form of digital identity has the potential to revolutionize the way in which data ownership and shared incentives are handled in online advertising. By providing a way for users to claim ownership of their browsing data and receive a share of the advertising revenue generated from it, the proposed system would result in a more transparent and equitable model for sharing the value created by online advertising. Additionally, the use of NFTs to store browsing data would provide advertisers with access to more accurate and relevant data, resulting in higher revenue and providing users with a new way to earn cashback, increasing the overall value of the system.

4 Integration with Cashback Programs

One potential application of this system is in the integration with existing cashback programs such as Honey and Rakuten. These programs currently offer cashback to users for making purchases through their links, but by integrating with the NFT-based advertising system, users would also be able to earn cashback for viewing and interacting with ads. This would provide an added incentive for users to engage with ads and increase the overall value of the system.

5 Encryption of Personal Data

Personal data privacy has become a significant concern in today's digital age. With the increasing amount of personal information being shared and stored online, the need for secure and private storage and exchange of personal data has become paramount. In this research paper, we propose a system that utilizes blockchain technology and smart contract to address this issue.

Blockchain technology is a decentralized and distributed ledger that allows for secure and transparent transactions. One of the key benefits of using blockchain technology is that it allows for the creation of smart contracts. Smart contracts are self-executing contracts with the terms of the agreement written directly into the code. These contracts can be used to automate the storage and exchange of personal data in a secure and private manner.

Our proposed system utilizes blockchain technology and smart contracts to handle the storage and exchange of personal data. By using these technologies, personal data can be encrypted using a public key that only a smart contract serving ads would be able to decrypt for ad personalization, which would allow user's personal data to be kept private and secure even from the company serving the ads. Additionally, by only allowing access to data on a need-to-know basis, the system minimizes the implications on personal data privacy. This is achieved by implementing a permissioned blockchain network, where access to the network and the data stored on it is restricted to authorized parties.

The use of blockchain technology and smart contracts in personal data storage and exchange has the potential to revolutionize the way personal data is handled. By providing a secure and private way to store and exchange personal data, our proposed system addresses the growing concern of personal data privacy. This system can be used in various sectors such as healthcare, finance, and government to ensure the protection of personal data.

Our proposed system utilizing blockchain technology and smart contract is a viable solution for addressing the issue of personal data privacy. The implementation of a permissioned blockchain network, coupled with the encryption of personal data, and the restriction of access on a need-to-know basis, ensures that personal data is kept private and secure. The system has the potential to revolutionize the way personal data is handled and can be implemented in various sectors to ensure the protection of personal data.

6 NFTs as a GDPR Compliance Tool

In addition to the benefits outlined above, using NFTs as a form of digital identity also has potential benefits for compliance with the General Data Protection Regulation (GDPR) (European Commission, 2016). The GDPR is a regulation of the European Union that gives individuals more control over their personal data. It includes provisions for the right to access, rectify, and erase personal data, as well as the right to data portability.

One of the key benefits of using NFTs as a form of digital identity in relation to GDPR is that it enables individuals to have more control over their personal data. With traditional systems, it can be difficult for companies to comply with the right to erasure, as it requires the deletion of personal data from all systems and backups. However, with the NFT-based system, users would be able to simply discard their current NFT and create a new one, effectively starting a new advertising identity. This would enable individuals to erase their personal data from the system without the need for companies to delete it from all systems and backups.

Another benefit of using NFTs for digital identity in relation to GDPR is that it enables individuals to have more control over their personal data by giving them the ability to transfer their personal data from one service provider to another. This is in line with the data portability right under GDPR. By allowing individuals to take their personal data with them, it also encourages competition among service providers and increases the choice available to individuals.

The use of NFTs as a form of digital identity has the potential to provide benefits for compliance with the General Data Protection Regulation (GDPR) (European Commission, 2016). The ability of individuals to have more control over their personal data, and the right to erasure and data portability, would enable companies to comply with GDPR requirements more easily, while providing individuals with more control over their personal data. It would also foster competition among service providers and increase the choice available to individuals.

7 Reputation System and DeFi Potential

In order to enhance the value of the NFT, the proposed system could also include a reputation system based on the individual return on advertising. This would allow users to build a reputation for generating a high return on advertising, which would in turn increase the value of their NFT.

The reputation system would work by tracking the performance of the ads that are targeted to a particular NFT. The system would measure the return on investment (ROI) of the ads and use this as a metric to determine the reputation of the NFT. The higher the ROI, the higher the reputation of the NFT. This would create an incentive for users to engage with ads and to build a reputation for generating a high return on advertising.

Furthermore, by including a marketplace for NFTs, the system would have potential for decentralized finance (DeFi) applications. DeFi is a decentralized financial system that enables peer-to-peer transactions without the need for intermediaries such as banks. By creating a marketplace for NFTs, the system would enable individuals to trade their NFTs with others, creating a new form of decentralized finance.

The NFT marketplace would also enable the buying and selling of NFTs, similar to a stock market. This would create liquidity for the NFTs, and the reputation system would provide a way for investors to assess the potential value of a particular NFT. Additionally, the marketplace could be used to trade NFTs as collateral for loans, enabling individuals to borrow money against their NFTs. This would provide a new form of decentralized lending and borrowing.

The inclusion of a reputation system and a marketplace for NFTs would enhance the value of the NFTs and open up new possibilities for decentralized finance (DeFi) applications. The reputation system would provide a way for users to build a reputation for generating a high return on advertising and increase the value of their NFTs. The marketplace for NFTs would enable individuals to trade their NFTs with others, creating a new form of decentralized finance, and NFTs could also be used as collateral for loans in DeFi lending platforms.

8 Modularity and Extensibility

One of the key strengths of the proposed NFT-based system for personal identity is its modularity and extensibility. This system can be easily integrated with existing systems and technologies, which allows for a wider range of applications and use cases.

One example of how this system can be integrated with traditional web browsers is by adding an extension that shares a public wallet address through metadata. This extension would allow users to access their NFT-based personal identity on any website that supports the extension. The public wallet address would be shared through metadata, which can be read by a traditional backend system to check for compatible NFTs.

This integration with traditional web browsers allows for a seamless user experience and increases the accessibility of the system. By using an extension, users can access their NFT-based personal identity on any website, without the need to switch to a separate platform. Additionally, by sharing the public wallet address through metadata, the system can be easily integrated with existing backend systems, which reduces the cost and complexity of implementation.

Another example of how this system can be integrated with other technologies is by using smart contracts. Smart contracts are self-executing contracts with the terms of the agreement written directly into the code. These contracts can be used to automate the storage and exchange of personal data in a secure and private manner. By using smart contracts, the proposed system can be integrated with existing systems and applications, such as online marketplaces and social media platforms, to provide a more seamless user experience.

The proposed NFT-based system for personal identity has a high degree of modularity and extensibility. It can be easily integrated with existing systems and technologies, such as web browsers and smart contracts, which increases its accessibility and allows for a wider range of applications and use cases. This feature is a significant advantage of the proposed system and allows for greater flexibility in its implementation and use.

9 Conclusion

In conclusion, we propose the use of blockchain-based NFTs as a form of digital identity for internet users, which would allow them to profit from the advertising revenue generated by their browsing habits while also providing a more transparent and equitable model for sharing the value created by online advertising. By integrating with existing cashback programs and encrypting personal data, the system would provide added incentives for users to engage with ads while also minimizing the implications on personal data privacy. Additionally, by including a marketplace for NFTs, the system would have potential for decentralized finance (DeFi) applications.

The proposed system has the potential to provide benefits for GDPR compliance and provide a reputation system based on the individual return on advertising. The modularity and extensibility of the system makes it easy to integrate with traditional web browsers, and the NFT can be easily traded, enhancing the short-term value of the NFT.

The proposed system can serve as an alternative to traditional targeted advertising, which has been criticized for its invasiveness and lack of transparency, and for the concentration of power and wealth in the hands of a few large companies (Zuckerberg, 2018). The proposed system allows users to receive direct financial incentives for sharing their data with advertisers, rather than relying on the current model of surveillance capitalism (Zuboff, 2019). This system can be a step towards a more equitable and transparent digital economy.

This whitepaper provides an overview of the proposed system, but it is important to note that the implementation and deployment of such a system would require further research and development.

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