

Web3: Decentralized Societal Infrastructure for Identity, Trust, Money, and Data

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Motivation and Challenges

Current messaging platforms violate the privacy awareness of their owners. Users also have no proper way to build trust with their contacts, which is often difficult in a digitally oriented world. Governmental authorities are the owner of their citizens' identities. Big-tech companies like Facebook and WhatsApp are equivalently the owner and in control of their users' data. Over the years, the transfer of money has become less and less private. Governmental institutions and banks have gained more insight in all transactions, albeit using automatic systems. The digital privacy of an individual's money does not exist anymore.

The main underlying problem is the nature of the centralized structure. This structure gives the platform owner or issuer full power over its users and their data.

This research is concerned with the transfer of value: **identity, trust, money, and data.**

Solution

The current version of the web, Web2, focuses on companies that provide services in exchange for user data by making them the product. As it helped to develop a digitally oriented world, it neglects the privacy of individuals. Web3, an ongoing effort for the new version of the World Wide Web, aims to bring back power and privacy to users. Decentralized infrastructures like blockchains are designed such that no central authority (or some authorities) has an unwanted amount of power. These applications practically allow anyone to participate without users having to monetize their personal data. Governments should equally provide their citizens the control over their own identity, the so-called self-sovereign identity. Citizens also should decide what to do with their money without the control of governments.

A decentralized societal infrastructure is proposed that incorporates a legally-valid identity to enforce trust between participants, while privately transfer money and data.

Features & Implementation

