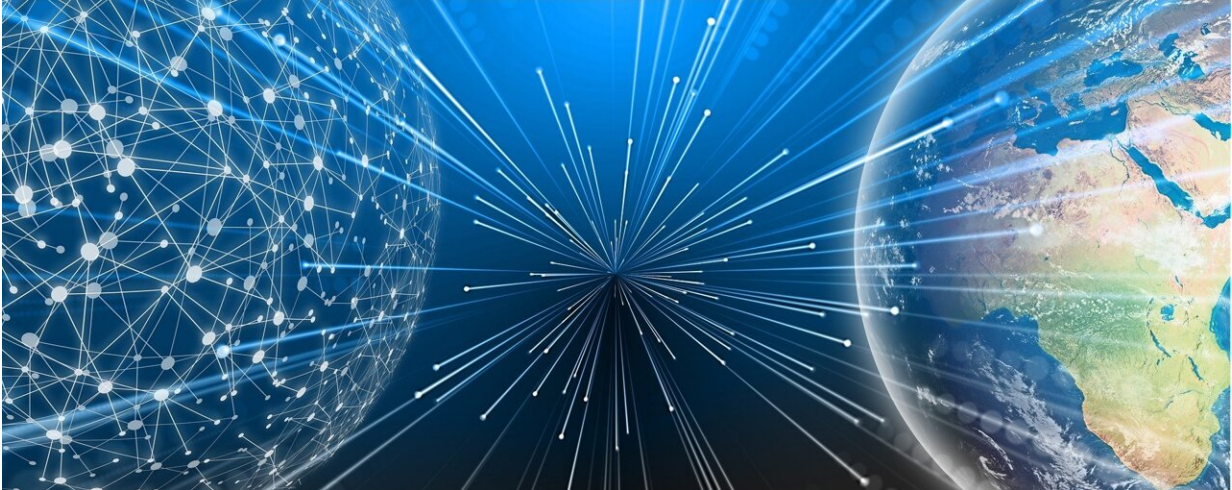


Blockchain blocks identity theft

March 16 2022, by David Bradley



Credit: Pixabay/CC0 Public Domain

Blockchain technology is perhaps best known for its role in digital, or crypto, currencies. However, it is simply an immutable, electronic ledger and so can have other applications such as the writing and signing of smart contracts. New work in the *International Journal of Critical Computer-Based Systems*, shows how the blockchain might also be used as a secure identity system. Such a system coupled with the aforementioned smart contract could then be used in personal and business negotiations to ensure the privacy and validity of interested parties' identities.

Mohith C. Shekar and H.L. Gururaj of the Department of CS&E at

Vidyavardhaka College of Engineering in Mysuru, India, and Francesco Flammini of the Department of Innovative Technologies at the University of Applied Sciences and Arts of Southern Switzerland in Lugano, Switzerland, explain that, as it stands, the sharing of a trusted identity is complicated and prone to privacy and security breaches. There is no universal method for ensuring a person is who they say they are in a digital or online transaction and no universal way to protect the personal and private data that might be shared in such a transaction from malicious third parties.

Blockchain technology, the researchers explain, offers a credible and tamper-free way to share an identity between two legitimate parties. Moreover, by coupling this [blockchain](#) identity with a smart contract, it should also be possible to ensure that only the components of the person's identity they wish to share are made available when the negotiating party inspects their blockchain identity. A public (encryption) key allows the user to share their identity but protects it from intruders. A blockchain identity might find immediate applications in banking, [e-commerce](#), government and elections, employment and even in gaming, [online dating](#), [social media](#), and other common activities.

There are estimates that in some parts of the world identity theft as many as four in ten people have been victims of identity theft. The widespread adoption and acceptance of blockchain ID could help reduce the number of future victims. Blockchain ID could reduce the risk of information leaks, preclude theft of electronic records, allow identity information to be stored securely on [digital devices](#) such as smartphones, laptops, tablets, and wearable devices. It would also reduce the sharing of excessive or unnecessary information with organizations. Ultimately, we, as users, take back control of our identities in the [digital world](#).

More information: Mohith C. Shekar et al, Securing personal identity

using blockchain, *International Journal of Critical Computer-Based Systems* (2022). [DOI: 10.1504/IJCCBS.2022.121370](https://doi.org/10.1504/IJCCBS.2022.121370)

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