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In us we trust
Decentralized architectures and ecosystems

How do we know if this passport is real? Or if the items passing through customs are counterfeit?

"Our identity is increasingly crucial in an increasingly interconnected world ."

If the citizen applying for benefits is who they say they are? If that news reel is real? What can we trust? We find ourselves more and more interacting in a world where there is an ever-increasing lack of trust in physical and digital interactions.

What if technology could help? It can - blockchain technologies can provide that trusted single source of the truth using code, cryptography, and technology protocols. Proof of truth arises as a community of users who do not necessarily know one another come together to attest to the validity of any transaction that is written to the blockchain. Once something is written to the ledger, it cannot be altered or deleted. Blockchains' "digital ledger" is distributed across the community of users, with each having the option to hold a copy of the ledger. This puts control of the ledger in the hands of many in a way that no one entity or small group of users can alter the ledger's content. This creates trust in a trustless world.

We all desire proof of the truth. Digital natives especially want a higher-quality proof of truth – and know that technology exists to provide it - "chain or it didn't happen". This proof of truth is additive to the optimization and transparency that blockchain technology provides and fuels further trust in systems and interactions – closing the digital trust gap.

Governments strive to be trusted by their constituents and rely on trusted data across a multitude of transactions – with constituents, organizations, partners, and even adversaries. Governments are somewhat unique in that they engage in transactions under several personas, including being a community participant and a regulator. Trusted and need to trust are core tenets in these personas. Many times, governments attempt to fill the trust gap via policies, processes, and procedures that can appear to be overly burdensome.

Blockchain can provide value by producing operating efficiencies alongside verifiable and transparent actions, leading to trust across a wide spectrum of areas. Digital identity and credentials, secure data sharing, and provenance and traceability are several of the use cases where government can participate both as a community member, as a regulator, or both. During Covid, New York State provided trusted digital credentials to its citizens which they kept in a secure wallet (mobile phone app) proving they had the vaccine required to gain access to venues.   The Bureau of the Fiscal Service, as part of the Department of the Treasury, piloted a blockchain solution that tokenized grant letters of credit on the blockchain. The intent was to provide trust that the grant was executed as intended, with transparency across all the layers of the individual grant participants. Because of this transparency and trust, operating efficiencies were identified, including the option of streamlining cash management procedures without compromising trust.

Our identity is increasingly crucial in an increasingly interconnected world. We carry driver licenses, passports, state identity cards, etc. to prove we are who we say we are. Yet in the digital world, there is a lack of any trusted identity. We keep passwords, pins, favorite questions and answers, etc. to help provide trust in our digital identity. Our current approach is cumbersome and fraught with ways to be compromised. Multiple state governments are starting to consider issuing digital identities anchored on the blockchain. California is one such state. In a report published by California's Blockchain Working Group in 2020, the group identified digital identity as one of more promising areas for achieving trust using of blockchain. They identified increased security and privacy, increased efficiency, and improved accessibility as the greatest potential benefits in using blockchain for digital identity. In 2022, California passed a law allowing vital records, such as birth and marriage certificates, to be issued on the blockchain.   That law further required the state to research how blockchain can improve the security and efficiency of its digital identity system. Time will tell how this will end but the journey is well underway and should be interesting to follow.

As standards evolve, interoperability becomes more mainstream, and the technology continues to mature, blockchain as a decentralized architecture and ecosystem should continue to be explored as the anchor for trust everyone is looking for in our everyday digital interactions. "Chain or it didn't happen."

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Contacts

For questions regarding *In us we trust: Decentralized architectures and ecosystems,* please contact:

Wendy Henry
Managing Director
Deloitte Consulting LLP
Tel: +1 571 858 1181
Email: wehenry@deloitte.com

Scott Buchholz
Managing Director
Deloitte Consulting LLP
Tel: +1 571 814 7110
Email: sbuchholz@deloitte.com