# Do Blockchains Have Anything to Offer Identity?

A white paper from the Internet Society *Why this? Why now?* 



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# Blockchain. Blockchain? Blockchain!



### What was the question?



## Thank you.



#### IAM (Identity and Access Management)

- IAM has become central to our online interactions, but like a
  lot of infrastructure it's largely invisible to users at least
  when it's well designed and implemented.
- IAM, whether as a technology or a business function, is by no means a solved problem. New architectures, business models and philosophies are all in play.



#### IAM & Blockchain

- Blockchain technology (aka DLT Distributed Ledger Technology) is also gaining a just a bit of attention.
   </wild understatement>
- Many IAM companies have launched identity registration solutions "on the blockchain," and others are developing new blockchain-based (or at least inspired) infrastructure for distributing user information/attributes.
- Are these in answer to actual demand, or a solution in search of a need?



#### Why this? Why now?

- Our paper should help those devising new IAM solutions, and those acquiring solutions and needing to evaluate blockchainbased approaches.
- Perhaps most importantly, we hope to provide guidance in evaluating current and new blockchain-based IAM solutions as they come along.
- https://www.internetsociety.org/issues/blockchain/



#### Blockchain for all things, everywhere, always?

- The objective of cryptocurrency to exchange electronic cash without intermediaries and without trust – is fundamentally different from that of enterprise IAM, which typically requires much more rigorous key lifecycle management and access controls than public blockchains offer.
- Several new blockchain technology developments show promise for improving particular aspects of IAM, such as the provenance of identity attributes and cryptographic keys.



#### Blockchain for all things, everywhere, always?

- After our analysis, it is clear that blockchain technologies are collectively a work in progress.
- Our conclusion is that despite early enthusiasm about their general security properties, on closer inspection we find that the original public blockchains are generally not a good fit for IAM.



#### Blockchain for all things, everywhere, always?

 Our recommendation is that any ongoing examination of blockchain technologies for IAM begin with a clear problem statement, and an appreciation of the nuances in blockchain security.

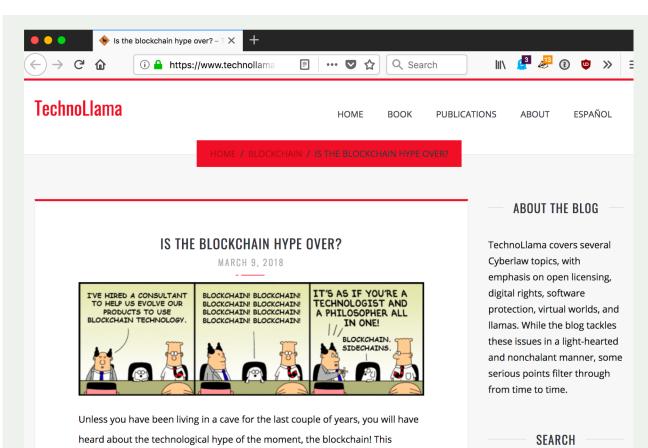


#### My Co-Author

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technology is set to revolutionise every single industry under the sun, and will disrupt the way in which we do businesses, interact with each other, and

"We should rebel against the creation of a system of immutable records where reality is irrelevant, and what matters is the truth as told by whoever entered the data into the blockchain. History is no longer written by the victors, but by the coders."

https://www.technollama.co.uk/is-the-blockchain-hype-over Andrés Guadamuz, University of Sussex, Senior Lecturer in IP Law



communicate with data.

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