

Blockchain & NFT (in Libraries)

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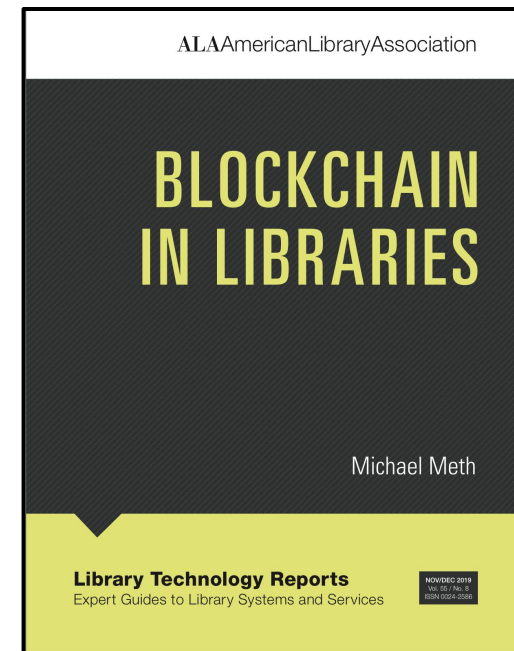
COLD
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A brief intro ...

- Librarian
- Formerly in finance and executive search
- Many different research interests (which is one of the reasons why I love being a librarian)

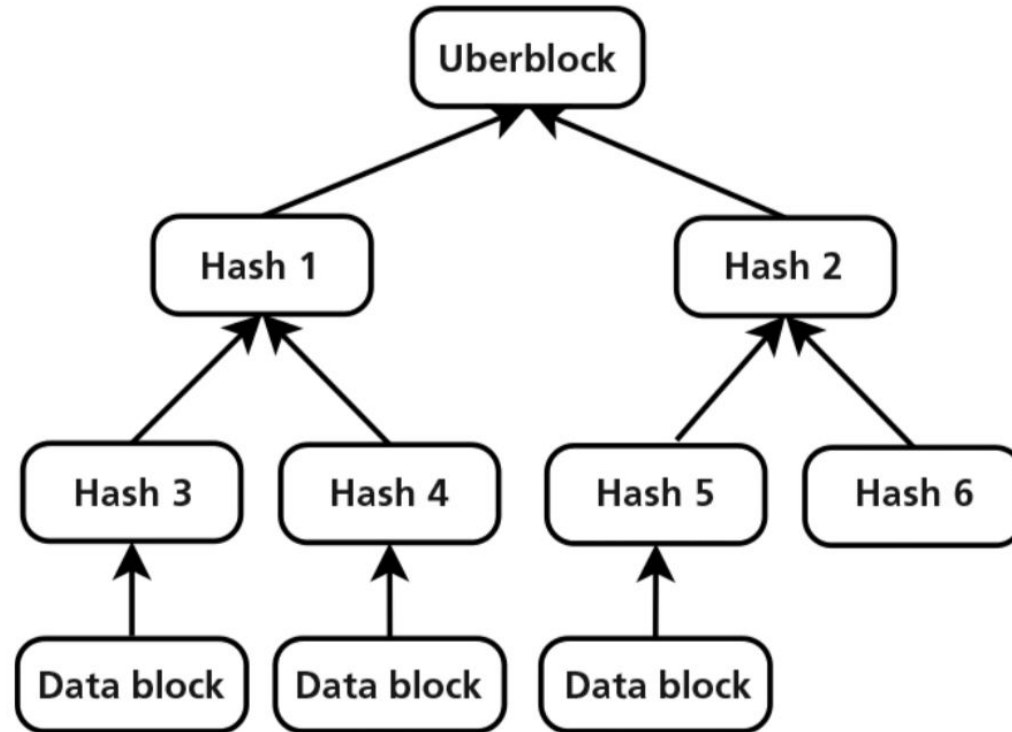


What is Blockchain?

- Blockchain is a logical concept that sequentially links verified transaction data together in an immutable record that lives in a distributed decentralized network.

3 Key Concepts

- Public and Private Keys
- Distributed Network
- Merkle Tree



Do you need a Blockchain?

This publication is available free of charge from: <https://doi.org/10.6028/NIST.IR.8202>

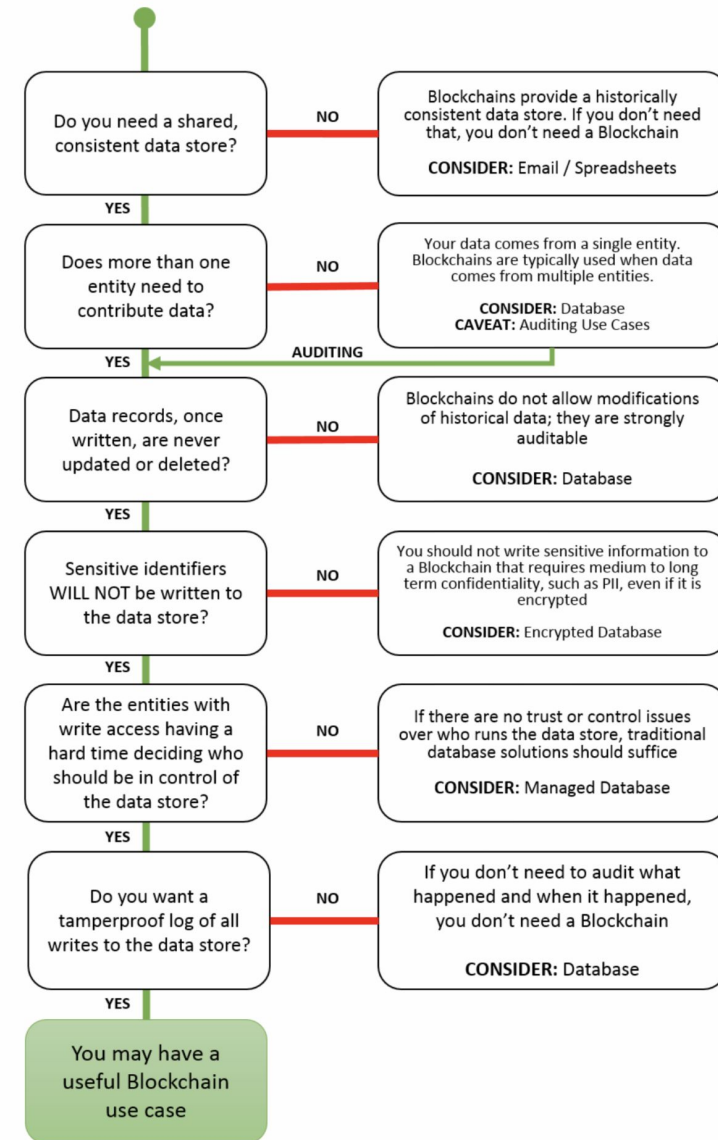


Figure 6 - DHS Science & Technology Directorate Flowchart

Public vs. Private Blockchain

Scalability
Power Consumption
Knowledge

What's in a Block?

- Any digital content
 - Incl. scripts and code

Who Uses Blockchain?

- Everybody can but most people don't
- Mostly developing as a B2B application ... for now
- Crypto and NFT are the most popular consumer applications

Why is Blockchain the Future?

- Ability to have an automated, verified transaction network.
- Remove/Reduce "middlemen" and transaction costs
- Different use case scenarios / thought starters from my book

Chapter 3—Case Studies and Thought Starters

1. Library Acquisitions
2. Collections Maintenance
3. Special Collections and Archives
4. Scholarly Record
5. Analytics in the Library
6. Reward Programs
7. A Unified/Verified Library "Card"
8. Blockchain for Information Literacy

Analytics in the Library

- Many different data sources
- Many different data storage “solutions”
- Many different reporting requirements
- Analysis?
- Privacy is a concern, especially with confidential/protected data

Blockchain for Information Literacy

- Information verification
 - Tamper proof
- Secure data, eg. videos, images, texts
 - Deepfakes
 - Forged photographs

Moving Forward

Chapter 5—Ethics and Other Considerations

Who Owns the Blockchain?

Who Owns the Data?

How Secure Is the Blockchain?

Unintended Consequences?

Legislation and Regulation

Want to learn more?

- SJSU's Blockchains for the Information Professional
 - <https://ischoolblogs.sjsu.edu/blockchains/>
- MOOCs
 - eg. <https://learn.canvas.net/courses/2503>
- Lots of online resources
 - For all levels of knowledge, including my "[Blockchain in Libraries](#)"

NFTs

Non-fungible tokens

(Non-fungible = unique)

What can be turned into a NFT?

Virtually anything.

Pros

vs

Cons

Community

Affinity

Portable

Perks/Engagement

Visibility

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No transfer of ownership

High Cost

Ownership of what exactly?

Tech know how

Security

Crypto

Privacy

Environmental factors

Q&A

And, thank you for the opportunity to speak with all of you.