Blockchain: Current Hype and Future Prospects

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Do you need a Blockchain?

NO
IRM Blockchain Survey

In 2017, IRM professionals said that they:

- Didn’t fully understand Blockchain
- Were unsure about its usefulness
- Needed to see more real-world use cases
Understanding Blockchain

Over the last 12 months in the IRM field:

- Awareness and interest has increased
- Understanding is growing, but…
- Complex technology with varied applications
Utilising the technology

The picture in 2018 hasn’t changed much for IRM professionals:

- IRM isn’t driving development
- Lack of finished products on the market
- Risky to invest at this stage
Not every idea is a good idea...

**ZeroTraffic**

Crowd-sourcing traffic congestion app:

Users have to buy crypto token before they can submit traffic reports

**Violanaia**

Blockchain-enabled dating app:

Puts your dating history on a public, immutable Blockchain

But from an IRM perspective:

- There are valid use cases for the technology
- They are up and running already
Case Study – Estonia

- Central government repository for citizens’ records

- Citizens can quickly see what information is held about them

- Blockchain elements added later:
  - Hashes – authenticates the records
  - Audit trail – immutable access and amendment logs
  - Citizens can see who is accessing their data - Accountability
Case Study - MedRec

- Platform to help patients access their medical records across multiple care organisations
  - MIT project, piloted in the US in 2016

- Does not store medical records
  - Uses ‘smart contracts’ to enable patient access

- Pilot version offered anonymised patient data as an incentive to researchers for ‘mining’
Do you need a Blockchain?

1. Do you need a shared database that multiple people can contribute to and access?

No? Then you don’t need a Blockchain.

Yes? Then move on to question 2.
Do you need a Blockchain?

2. Do you need an immutable, time-stamped log of all additions to the database?

No? Then you don't need a Blockchain.

Yes? Then move on to question 3.
3. Are there trust issues between people contributing to and accessing the database?

No? Then you don’t need a Blockchain.

Yes? Then move on to question 4.
Do you need a Blockchain?

4. Are you planning to store data that might need erasing or changing in future?

Yes? Don’t use a Blockchain.

No? Then move on to question 5.
5. Are you planning to store personal and/or sensitive data?

Yes? Don’t use a Blockchain.

No? Then Blockchain might be useful!
You might want a Blockchain

You don’t need one now, but:

▪ There are valid IRM use cases
▪ It can enhance our existing systems and practices
▪ Real-world examples are out there, although not proven long-term (yet)

Be aware of the limitations:

▪ You can’t just put everything on a Blockchain
▪ Technical barriers to implementation
▪ Risks and costs associated with early adoption
The Future - Will you have a choice?

What about pressure from outside your organisation?

- Government Schemes
- Access to other organisation’s records
- Public demand
- Identity management
- Evolving technologies
  - Lightning Network
  - The Tangle
Any Questions?
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