

DECENTRALISED UNIVERSAL ARCHIVE

A short proposal for a large project

The United Nation's 'Universal Declaration of Human Rights' states that everyone has the right to 'receive and impart information and ideas through any media and regardless of frontiers'¹. This short proposal seeks to begin a conversation about how that could be done, by asking the question 'what is possible?'

What is the proposal?

To build a decentralised self-sustaining network of servers hosting archive data to enable the collective knowledge of humankind to be available to everyone, through any media, regardless of frontiers.

How would this be achieved?

As with the Wikimedia Foundation – the true success of the project wasn't decided in how or what was done, but how the decisions about how and what was done were made. Accordingly this proposal begins by setting out a process for deciding the first steps in this project. This process would be an online decision making tool – with a transparent discussion anyone can be part of.

What are the main features?

Orwell's 'Nineteen-Eighty-Four' portrayed a terrifying future where the past can be edited and access to information controlled. In order to prevent this, and any kind of censorship – the archive must be:

- **Immutable** – the archive will be uneditable, unchangeable.
- **Universal access** - it must be accessible to anyone everywhere, and impossible for anyone to block
- **De-centralised** – no one person may control any aspect. It must be decentralised and also exist 'offline'.

What would it archive?

Anything – agreeing what to archive will be a transparent process. Initially, the most practical things to archive would be Wikipedia and the Internet Archive -creating a permeant decentralised mirror for both sites. The project could offer 'public good hosting', hosting scientific data (for example, DNA sequences of trees in order to track timber around the world).

What about 'money'?

- **Not-for-profit** – the project exists for all humanity, any income is invested back into the project, transparently. Initially the project would only accept donations.
- **Creativity incentive** - The archive would also offer a chance for content creators to be paid in advance (perhaps by a form of crowdfunding) by 'coins' for creating content – on condition that once it is created, the digital artefact is forever preserved in the archive for all humankind.
- **Fee-for-service** – after proving viability and credibility, the project could fork, and after the fork it would be able to offer fee for service. For example, offering those donating bandwidth and power incentives in 'coins' to 'host' blockchain archive; charging those who wish to host data in 'coins'. Hosts can opt out of the fee-for-service fork and chose to only host core archive data if they wish. Then fork to offer fee for service for storing scientific data – people can opt out of hosting this – and continue the other fork of archiving essential human information.

Core values

Neutrality – anyone, anywhere can access anything – for free

Transparency – all decision making and all code will be in the public domain

Democracy – all decisions will be made in the open, involving anyone who wants to take part

What technology could be used?

Blockchain – this project would seek to store the information in the blockchain – with URIs to resources encoded. Decisions about what is archived will be made collectively and transparently using an online voting process.

Who is proposing this?

'Science for All' is proposing to host the ongoing conversation about how this project can be achieved – using a transparent decision making process that anyone can be part of. We hope to partner with anyone who is interested.



Learn more at ScienceforAll.World

This document was written by Jack Nunnon, who is the Director of 'Science for All' – a not-for-profit organisation which supports everyone in the world to shape the future of human knowledge. Contact info@scienceforall.world - @scifall - 24 July 2018 - 'Decentralised Universal Archive V1.docx'