

## Citation

This pages describes an initial Idea to utilize Blockchain, Smart Contracts and Content Blocks in conjunction with real time content monetization (coil).

Content re-usage, cross site citation and monetization is one of the next things to solve. After implementing coil, tiki will have to create content blocks with unique IDs and save them to a secure storage.

This could be a blockchain which will make up for a secure version control and revision system. Also those IDs can be used to cross reference content snippets allowing for monetization if reused by other sites. A built in mechanism (smart contract) will automatically share revenues on page views via the payment interface.

An admin interface will allow to set values for revenue shares based on page ranking (source/target), page reference count etc.

## Why?

By creating an unforgeable storage content will be citable and reliably available for future reference. Today a link does not contain an information about the content itself and the target is subject to change without any machanism for the referencing party to know when or if the originally linked content has changed nor does a link reference contain a secure way to a specific version. Thus a screenshot today is the most reliable way to cite, but is also easy to tinker with tools like gimp.

Today linking to content isnt a reliable thing. Even if linking to a revision of a page via <https://dev.tiki.org/tiki-pagehistory.php?page=Citation&preview=4> or so it would be easy to change the revision content in the mysql database.

Because of the very nature of its technique this would not be possible with blockchain, as it would invalidate all later blocks.

Additionally cross site content monetization is a cumbersome process. By having this automated via configurable smart contracts the monetization becomes a natural thing like todays simple page views.

This will also allow to use tiki for scientific scenarios as the count of citations/references is the main "currency" for scientific publications and current formats for interchanging are PDF/HTML or other static files, those are hard to mantain and ever publication has its own foramtting requirements. One scenario could be that the publication will be stored in tiki and formatted (automatically) towards target publications. Those can rliably refference the content, which today isnt possible.

## How?

By having content addressable by eg paragraph and its cited/linked version and having this hooked up with the payment system its possible with tiki to create reliable cross site content sharing and monetization.

Mostlikely we could use the fabric framework for afoundation.

## What?

Tiki will have an optional blockchain storage path for content and its versions.

It'll be optional, redundant (in addition to MySQL) and save information in an unforgeable way.

This will also open the door to:

- Secure asset management
- Reliable case documentation
- Transaction monitoring/logging
- Smart Contracts

and many more applications.

If implemented with the tracker feature tiki could act as an interface and data base builder for smart contracts and blockchain applications.

Pairing up with the recent monetization and the ML features tiki will define a new level for CMS based applications.

For a start see:

[https://en.wikipedia.org/wiki/Hyperledger#Hyperledger\\_Fabric](https://en.wikipedia.org/wiki/Hyperledger#Hyperledger_Fabric)

<https://www.hyperledger.org/>

For an example of a simple UI and Blockchain for asset management see

<https://github.com/MultiChain/multichain-web-demo> (Multichain is proprietary though not really usable for tiki but up and running fast for getting the idea)

[https://holochain.org/why\\_holochain](https://holochain.org/why_holochain) (p2p)

alias

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- [Blockchain](#)
- [Smart Contract](#)