

How we develop LikeChain using Cosmos SDK

Chung Wu
LikeCoin Foundation

Outline

LikeCoin

Tendermint

Cosmos

Cosmos SDK

- Example

LikeCoin

- A token for contents
- ISCN: International Standard Content Number
 - author, description, license, URL, ...
- Reward content creators by tokens
- Users use the tokens to govern the system
 - e.g. govern content source to fight disinformation
- Goal: an ecosystem for contents with sovereignty

<https://like.co/>

i612: Lennon wall on Blockchain

A proof of concept of ISCN

(based on Ethereum and IPFS)

<https://i612.netlify.com>



ISCN

Properties

IPFS NODES



IPFS Hash

ipfs://QmXxs4jrLZoRYbU4eNCfupffJf17pdw...

Blockchain Transaction Record

[0xec065f248049b82b30880bb21911ad7e5e98...](https://blockchain.com/tx/0xec065f248049b82b30880bb21911ad7e5e98...)

Blockchain Transaction Time

Wed Aug 14 2019 20:57:45 GMT+0800 (香港標準時...)

Creator

ckxpress

License

<https://creativecommons.org/licenses/by-sa/4.0>

ISCN

Properties

IPFS NODES



IPFS Hash

ipfs://QmXxs4jrLZoRYbU4eNCfupffJf17pdw...

Blockchain Transaction Record

[0xec065f248049b82b30880bb21911ad7e5e98...](https://blockchain.com/tx/0xec065f248049b82b30880bb21911ad7e5e98...)

Blockchain Transaction Time

Wed Aug 14 2019 20:57:45 GMT+0800 (香港標準時...)

Creator

ckxpress

License

<https://creativecommons.org/licenses/by-sa/4.0>

Date Created

2019-07-15

Description

大埔連儂隧道

Content Location



Tendermint

A blockchain engine

Separate blockchain consensus engine and application logic

Help building application-specific chain

<https://tendermint.com/>

Tendermint

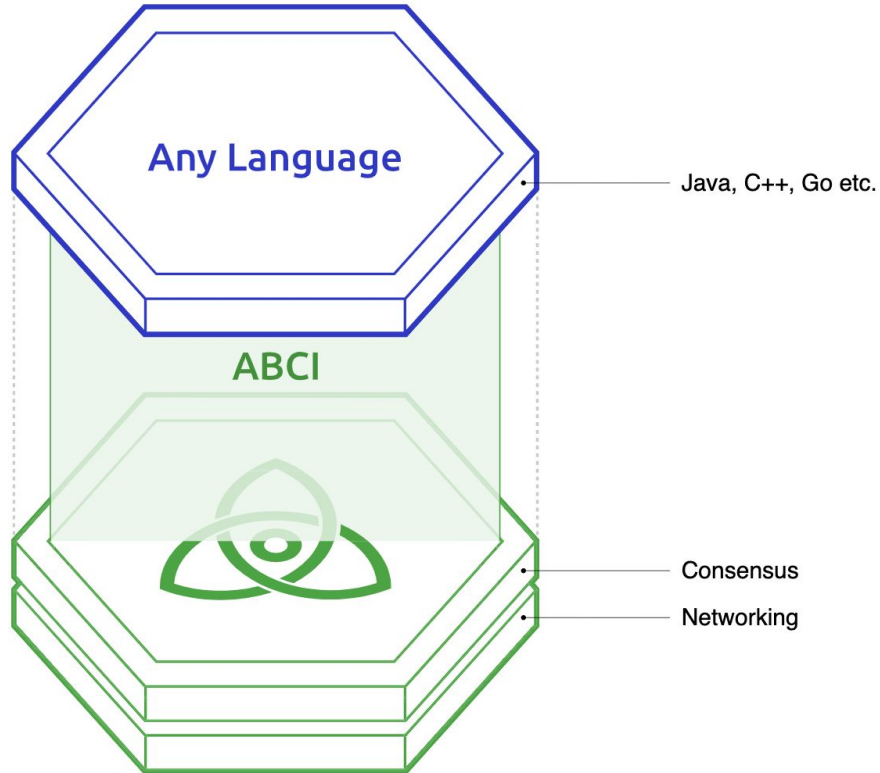
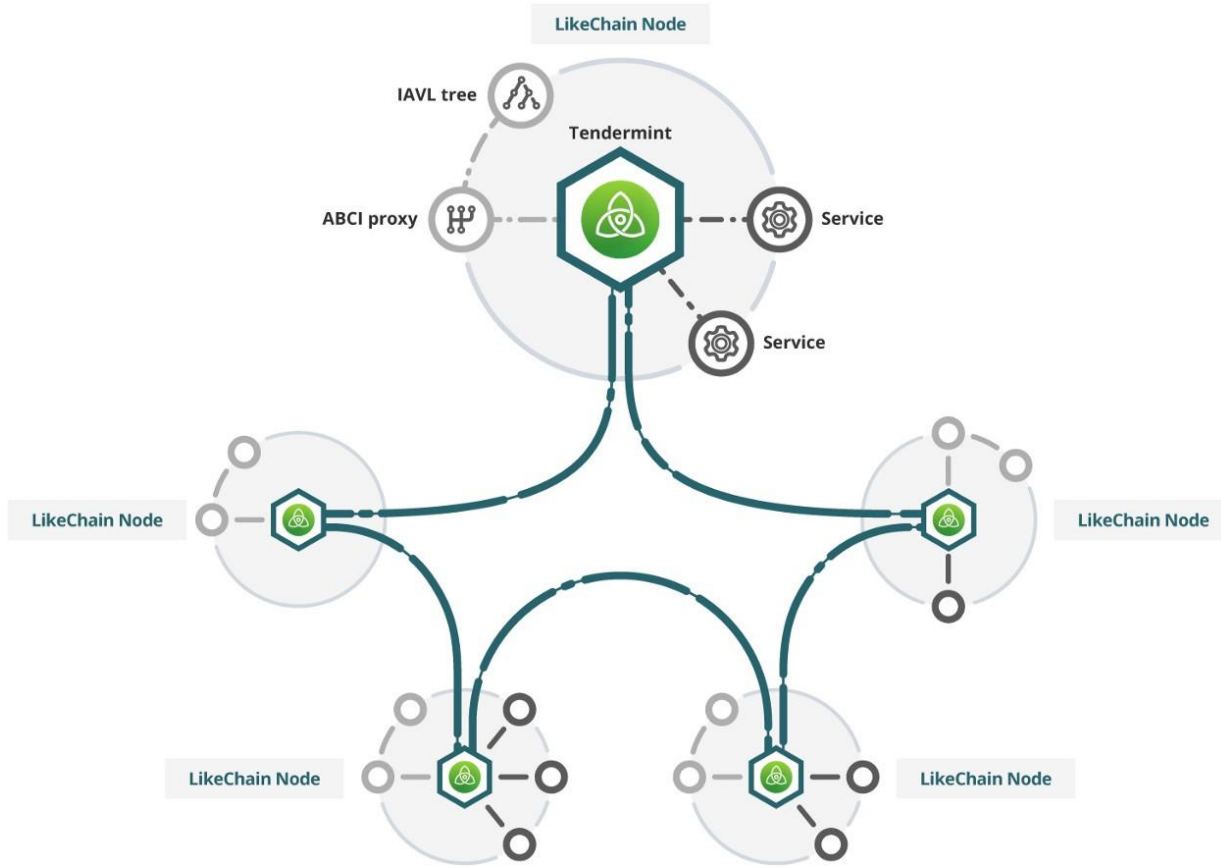


Image source: <https://cosmos.network/intro>

LikeChain @ Tendermint



LikeChain @ Tendermint

Consortium sidechain of Ethereum

2-way token exchange between LikeChain and Ethereum

Same Ethereum address and signing format

Problems

Needed features:

- public chain
- governance

crucial but complicated, hard to do right

Cosmos

A network of blockchains

- Zones: application-specific blockchains
- Hubs: blockchains which connect Zones together by Inter-Blockchain Communication (IBC)
- May also connect to other blockchains through peg zones

Cosmos

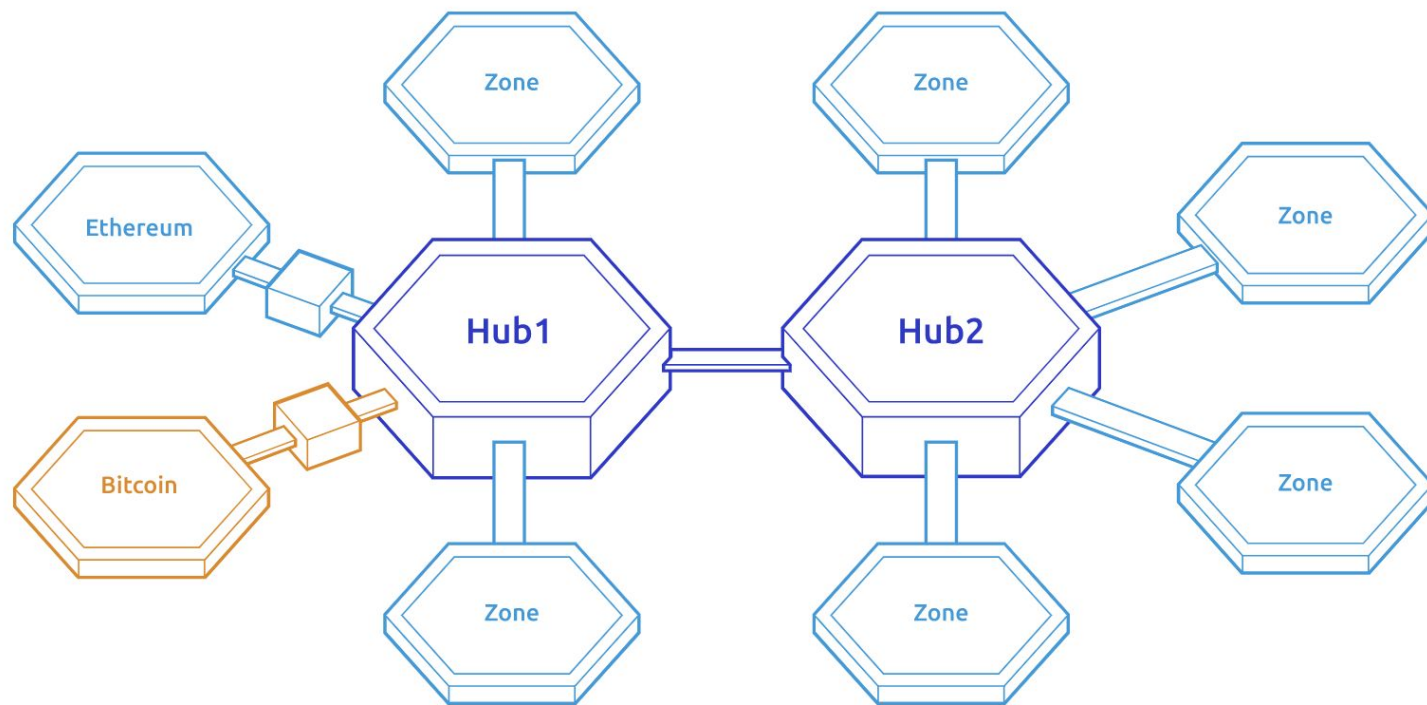


Image source: <https://cosmos.network/intro>

Cosmos SDK

On top of Tendermint

A framework for developing Tendermint based blockchain
libraries of modules, e.g. auth, bank, staking, governance

Cosmos SDK

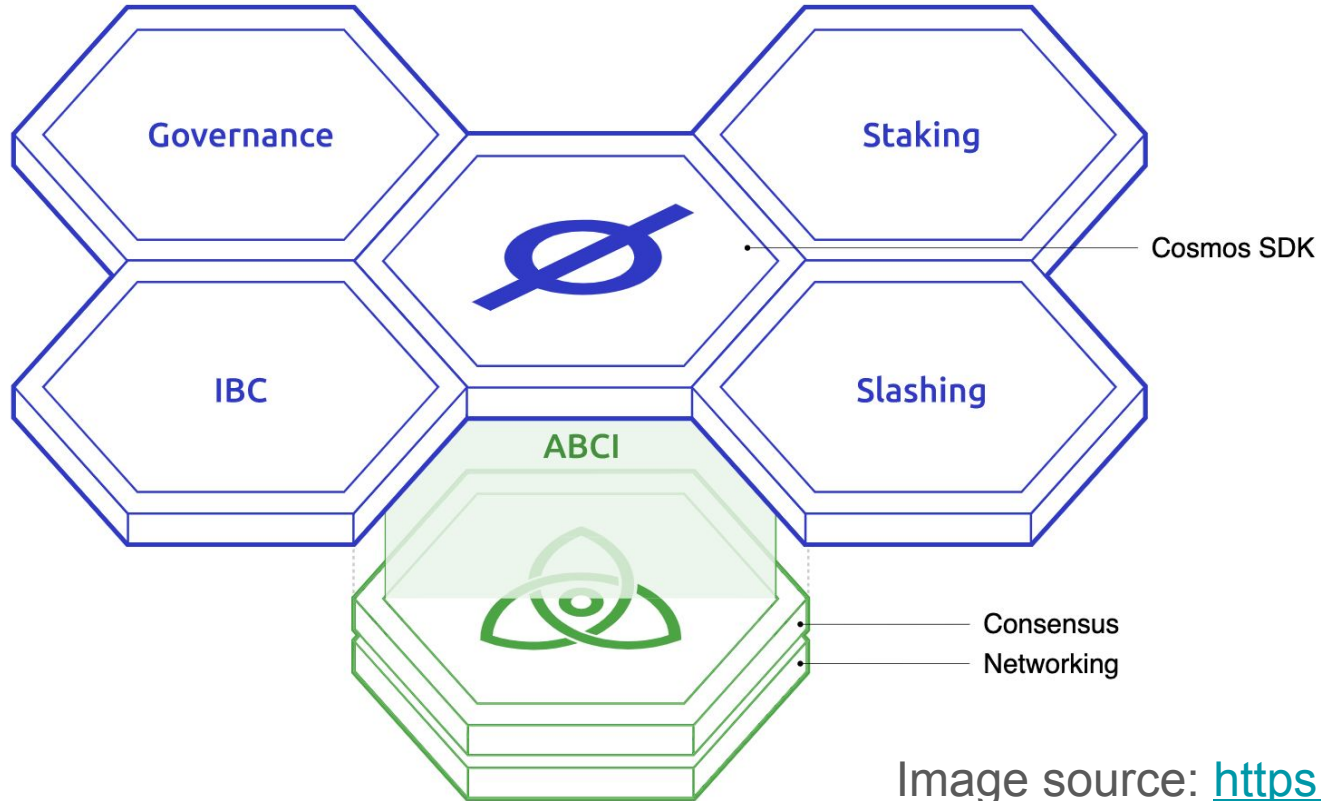
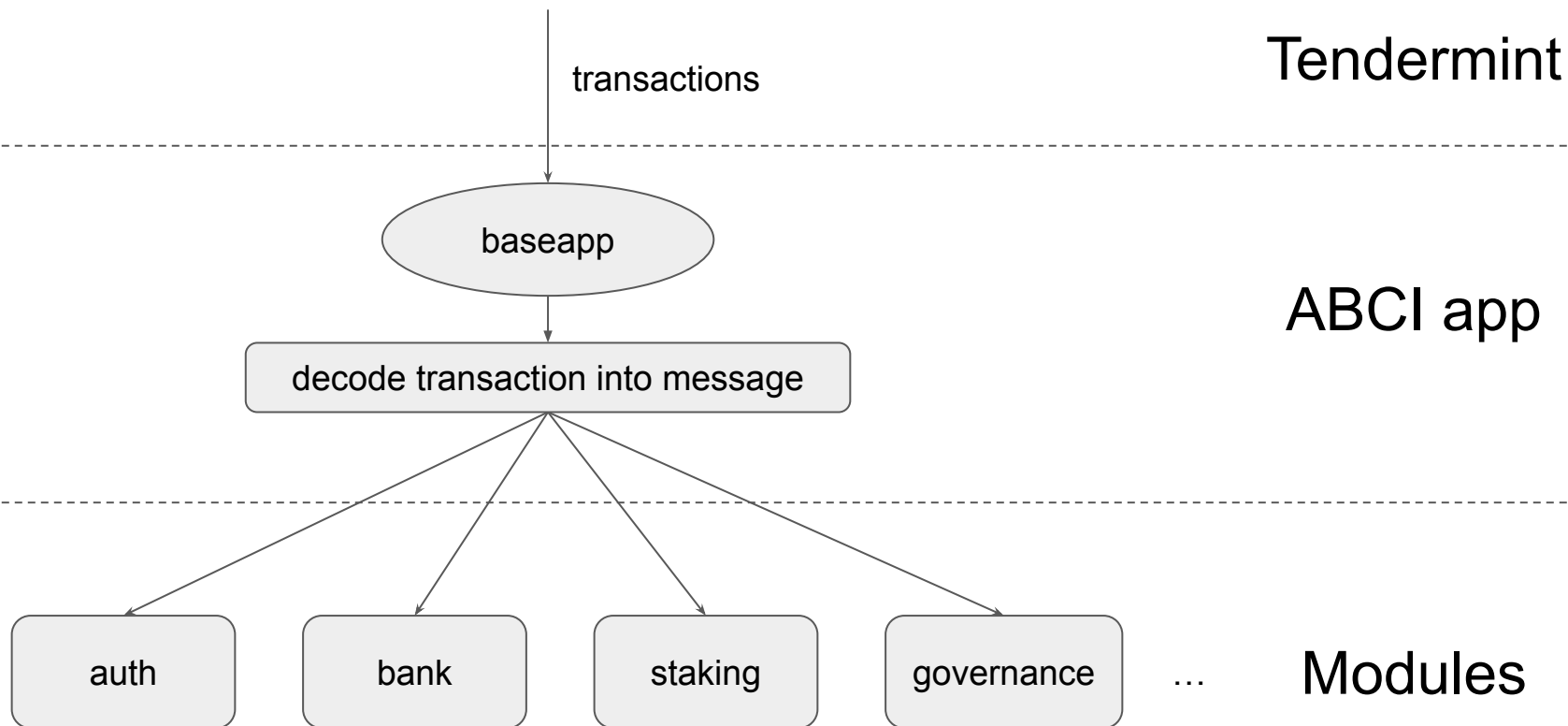
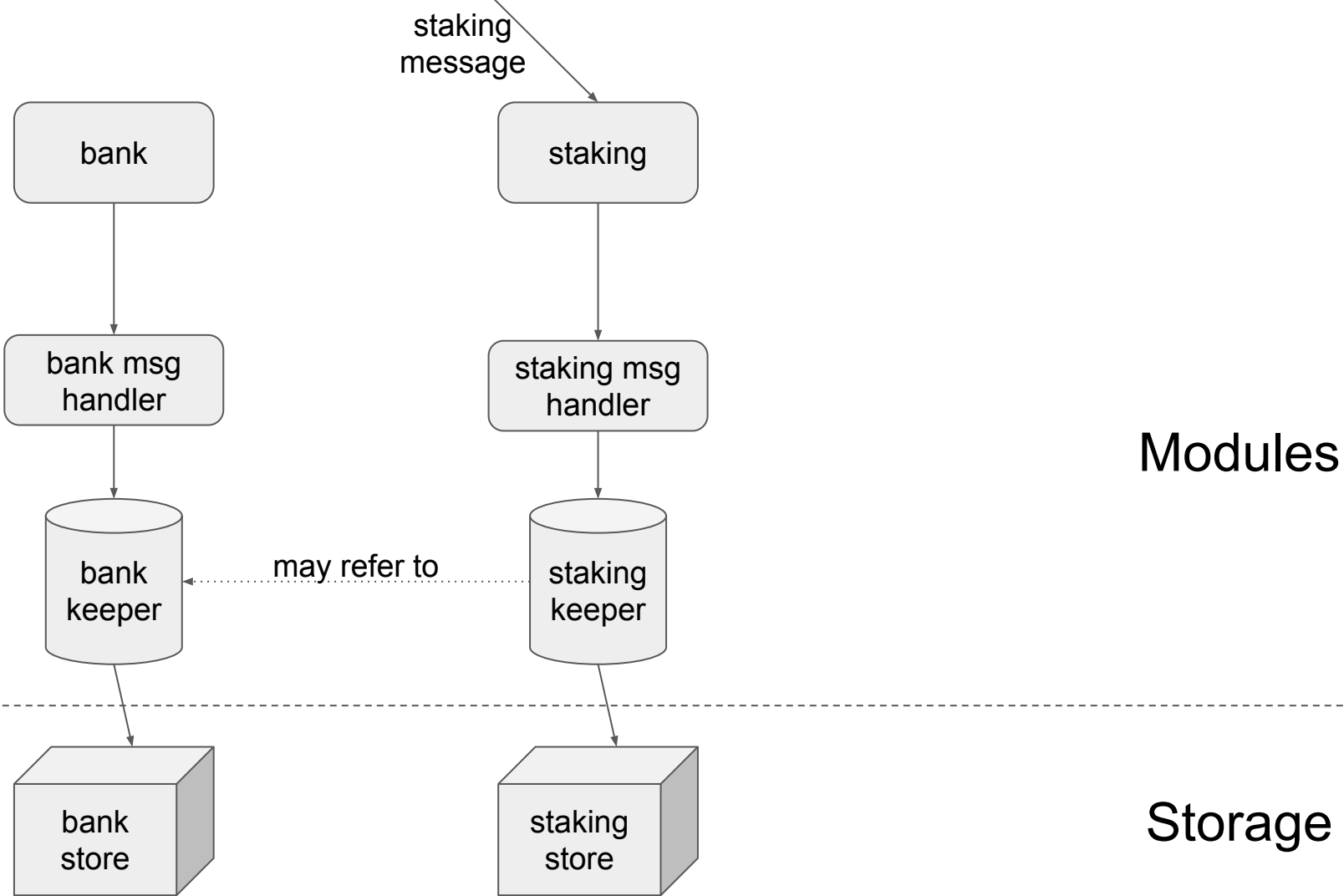


Image source: <https://cosmos.network/intro>

Cosmos SDK Architecture





Civic Liker

- subscribe for 5 USD per month
- converted to LikeCoin
- distributed according to your Like by clicking Like Reward Button on contents

<https://liker.land/civic>

讚賞公民每日報告

09/08/2019

你共讚賞了

\$0.5 USD

支持創作

你共讚賞了



[standnews](#)

\$0.25
USD



[【特寫】8.5「最悶」一區 當警察
不見蹤影 沙田示威者無處宣洩的怒
火 | 立場報道 | 立場新聞](#)

創作於 thestandnews.com



Example: Civic Liker on chain (proof of concept)

Modules:

- subscription: transfer user's coin automatically into subscription pool every period
- civicliker: distribute coins in user's subscription pool according to their Like on others

<https://github.com/likecoin/hackatom-seoul-2019>

Resources

<https://tendermint.com/docs/>

<https://cosmos.network/docs>

BoF: 區塊鏈如何幫助打擊虛假訊息(“假新聞”)?

IB305

18/8

12:00-13:00