

Proof Of

Monetary Construct

Fiat – centralized printing backed with a promise

Bitcoin – decentralized trust (51% attack based on seeding network compute power)
, proof of work for each transaction to ensure no double spend. Both use mathematics of cryptography/prime number theory.

Law (contract) Construct

bitcoin smart contract – attach rules/knowledge/file along with blockchain transactions

ethereum – application-block chain protocol turing complete(Dapps),

Post Monetary Construct – data information knowledge intelligence

proof of data – does having it authored/captured/record etc. mean it is anymore trustworthy?

proof of science – given an outcome, the underlying data to reproduce indefinitely is available

proof of knowledge – an extracted universally applicable programme based on any set of input data

proof of being – grantee the data and underlying software models and simulation are based on actual recorded reality.

Objective of 'Proof of'

Self intelligence augmented on trusted data

Change to a peer to peer data model and decentralization of measurer technologies e.g. AI, data mining, future simulations etc. e.g if new knowledge is known in any one application, then when verified all peers on the network get notified and applied to their own AAE self, thus all peer intelligence is improved and thus the collective intelligence maximized.

Music example for applying some thinking

Popularity evolution- around the camp fire, monetary value of a unit of sale, number of downloads, listening numbers. How about measuring how you feel, impact on health, wellbeing sensor metrics i.e. examples of post monetary value system.

Prevention of Fraud

-Made up contracts

There is nothing stopping anything being author in any AAE environment. However, the most fundamental incentive of the individual is there to support this not happening – the impact will directly affect their life thus they would only be bullshitting themselves. They might want to make up contracts to game the system and way to prevent this are discussed below.

- Made up sensor data

The sensor could be working perfectly but the individual could still hack in the recorded measurements produce made up data. The disincentive such activities all data in blockchain contract will have to encrypt unit of measure by unit of measure the data. This adds extra compute resources required to produce a contract, however, for one individual this will not be noticeable but for some one gaming many AAE contract environment the cost becomes significant

- Made up computation

How can the resulting measure of any sensor be trusted when some sort of calculation is required using software i.e. pulse rate is in beats per minute. What if the software subtracted or event add 10 beats or the average over many minute was miscalculated due to a bug in the software. Software running in the AAE environment could be forced to be open source code. Also, competition between AAE computation software will ensure those receiving the best peer install will give some credibility the programme is working as planned. It can be envision a type of DAO could be employed by the network and rewarded to check on the accuracy of the computation software.

- Peer to Peer collusions

One peer on its own can stand out but what if a network of peers collude to support their 'view of the world'? Ie make up data to support their computation programme that proves they improve weight loss and thus get rewarded by a vast number of peers in esseCoin? The cost and complexity of producing such a setup will be vast given the sets taken above. However, when the network is small this might be a real concern.

Compare Incentives to participate

	Fiat Money	Crypto money	Post money- esse
Human motivation			
Trust	Centralised	Decentralized	Decentralized – implant
Contract	Fixed	Smart	Outcome based dynamic
Context	Numerical	Numerical	Describe in laws of nature
Computation	Centralized servers	Mining pooling - individual	Individual