

## Mapping

### Introduction

The connecting glue between data, peers on the network and information across the universe is called mapping. In a science blockchain miners are called Mappers. The purpose of the network is to “map out” the environment, life and the Universe at large. Each peer in the network has the right to participate in mapping activities, whether that be sensor data recording, computation or 3D printing. Mapping activities will be 'rewarded' by a value or voting outcome granted by each individual peer on the network. The proof of data mechanism on the blockchain preventing the gaming of mapping.

### Function of Mapping

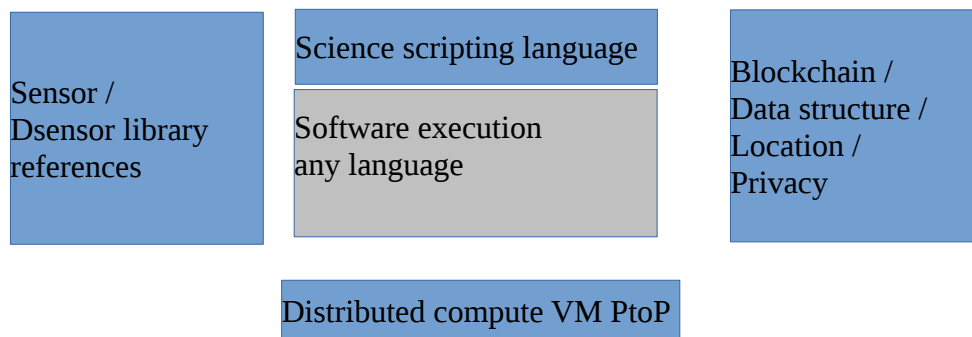
The act of mapping covers the following:

### Value of Science

#### Introduction

Two forms on science value needs to be mapped out. Existing knowledge in the form of information and scientific hypothesis set out in information. A mechanism to map both types will be required.

The first stage is to establish Sensor based Science protocol. And from these crude beginnings expand the range of science activities to be mapped out. Evolving the protocol over time will be built into the protocols software design.



### Science Scripting Language

To provide a standardized/ constrained set of commands to summaries a scientific hypothesis or summarized equation or proof. This will be mapped an execution environment where any software language can actually preform the computation.

### Value of Science

#### Introduction

A new scripting language for authoring scientific hypothesis will be built. (need to review suitability of ethereums Solidity language). This will provide a range of tools to stitch together peers, sensor data, blockchain references and computational resources.

### **Mapping value activities:**

#### **Precision of measurement**

Each sensor registered on the network will be rated for its granularity of measurement.

#### **Computation and Complexity**

A VM computation quantity of computational resource will be standardised and combined with complexity of program execution quotient that has some existing validity in mathematics/computer science.

#### **Collaboration and consensus**

The inner working of the proof of data/stake mechanism for the operation of the personal and other blockchains. This will be strongly subject and reflect peers participation i.e. voting with their own data and computation resources.

#### **Cause and Effect**

A hypothesis that achieves 100% consensus across the network. Becomes an ever present computation model running on a peers data.

### **Research Signal**

#### **Introduction**

This will replace price (as in monetary) signal as the governing number for the network to guide its collaboration activities. For example, this will give sensor makers the insight on where to innovate for greater granularity of measurement or highlight areas not being measured, or on the computation side, focus energies on the urgency of problems needing solved or an indication to the entire network of the complexity of a problem etc.

#### **Past - Future**

The Research signal will use all available information. Looking to the future will be the primary concern of signal and thus giving the network of peers the best insight to focus their activities.

#### **Future Hypothesis**

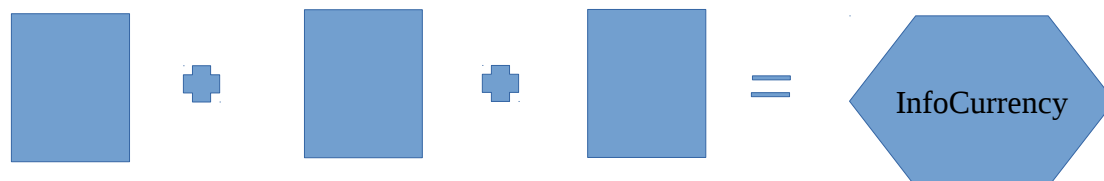
The future is an uncertain place. Is it possible to find a consensus mechanism to value hypothesis. Yes, by the use of simulations. These simulation will be based on the consensus outlook each peers chooses to support.

### **ModusCoin – Infocurrency**

#### **Introduction**

This will be a Infocurrency. Cryptocurrencies reward that act of mining, an Infocurrency will reward the act of mapping. An Infocurrency differs from all monetary (fiat or crypto) currencies in that 'pricing' is context specific and the underpinning information in that context is actionable i.e. can be used directly in any computation.

### Three value vertices's



### Capture

Fixed objective measure mechanism. Like printing your own money.

### Compute

The use of the captured data in a computation e.g. how many times

### Consensuses 'votes'

A subjective value expression by any peer in the network. Gives the property of different 'prices' for different networks of consensus.

Sample calculation:

1.

### Prevent fraud or gaming of the system

### Made up data

Proof of data mechanism via Dsensor library

### Computation for sake of computation

### Outcome of data

Proof of printing mechanism via Dprinter library

### Collusion of consensus

False network created to create false peer votes

### No transfer of ModusCoin

An infocurrency is none transferable between identities. It is a one way flow or osmosis of value to an individual, sharing data or computation models is the mechanism exchange 'value'.

### **Compared to Fiat or Crypto Currency**

One universal price signal is generated by the market mechanism, this false to hold true for a infocurrency. Speculation is not possible due to the non transferability of an infocurrency. Store of wealth, intrinsic value or transaction value are non rational mechanism for an infocurrency.

There is no need to have money supply and demand. Money supply in fiat or crypto currency is abstracted to notional terms, an infocurrency captures the information behind reality. If there is more than one reality there will be more than one infocurrency.

Mapping definition

flowchart in hpy theory built

rightsized to or constrained to sensors

or compute power available

room temp and productivity