Knowledge Economics Project

A complex biosphere & sociosphere currencies project to support 'web civics' activities.

16.09.2023
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Overview

The purpose of this document is to raise considerations about how a blockchain method; thought to best employ the emergent e.cash ecosystem, could be employed to support and address 'knowledge economy' use-cases, with a particular focus upon seeking to address 'digital slavery' related use-cases; whereby, the desire is to provide dignity for those who otherwise most often fund the cost of doing useful work that is then considered to be 'free'.

Background

There are many terrible problems in the world. It is generally very difficult to find the means to provide people the ability to provide an employment opportunity to address any of those problems; and then, the structure of these forms of means for engagement is generally also not fit for purpose.

Work vs. Employment

The distinction between 'work', outcomes and 'employment' has been muddied by various classes of actors; who benefit from the lack of insights that could otherwise be made available to associate causal factors related to effort.

In consideration; this project seeks to focus upon providing support for what may otherwise be classified as 'unpaid work', whether it be also then sought to be defined as 'volunteer' work or similarly sought to be defined as to legally capture the benefits of those efforts for the economic benefit of the agent seeking any such form of contract; without recognition, compensation for costs or similar.

This is a particularly significant problem with respect to the field of 'knowledge work', impacting people differently to 'bricks and mortar' forms of 'work' activities.

Abuse, Exploitation vs. Responsibility

The simple fact is; that there are no rights provided to persons who seek to engage others in contracts not capable of consent; which, in-turn requires some form of consideration.

Furthermore; there is no moral responsibility reasonably required from a victim of an exploitative actor, who may seek to steal the useful derivatives & gainfully benefit; but may then be found that there is some sort of issue, flaw or problem with what it is they stole, that may lead to outcomes other than those any such form of exploitative agent sought.

By ensuring support for 'fair trade' people involved; become responsible for the consequence of their actions, derivative works, and other aspects that have meaningful causal implications; that cannot be otherwise addressed easily, via corrupt economic systems.

Systems that support human rights and dignity, also support rule of law.

## Debilitated 'status quo' circumstances

As a consequence of what people have focused upon in the past; and what has not been the focus of people's attentions, there are now many issues associated to the creation of

alternative ecosystems, that could in-turn become part of the future solutions needed, to address these sorts of problems in a meaningful way; without unintended negative consequences.

It is presently considered to be a 'blank slate' when it comes to figuring out how to address these sorts of problems via means that seek to advance the internet.

There are a few examples;

1. Whilst people should reasonably expect to be paid fairly for humanitarian works; and then also, be furnished appropriate protections, this is often not the case.

    a. There is a dichotomy of substance; between, doing 'free work' vs. being paid or indeed also, how to be paid FAIRLY for USEFUL works, but not forever.
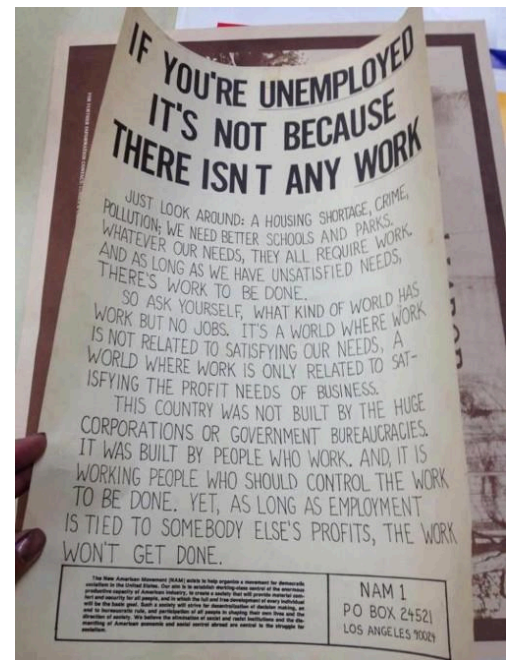
        People were historically paid to build civic infrastructure; but they did not own the buildings, they were just paid so that they could support themselves.

    b. As these systems do not exist; the economic burden of seeking to address these problems can be a barrier to doing anything of useful substance at all.

        i.   It is very difficult to go from a system based upon 'free work' (without attributing where the resources are coming from); to a fully fledged economic system, that may then in-turn require 'employment' law compliance.

        ii. In many cases, this is simply not possible; and acts as a barrier to doing anything about it, whatsoever.

    c. There are too many examples; where people have been doing 'free work' for the betterment of society, at times at the very top of the global groups most well known; and then, those people suffer from attacks, or become deceased. Leaving children, spouses. With no protections, no income.

2. Works intended for 'good' purposes; end-up being 'freely' exploited by adversaries who have far greater amounts of resources; who then use that work, to seek to achieve the opposite;

    a. There are no legal protections available for people who are exploited.

    b. There are means to seek to ensure knowledge controls whether or not exploiters (corruption professionals) do not succeed; but this is not ideal.

    c. The ability to support the maintenance of works, suffers greatly as a consequence. Often, the real-world productivity outcomes suffer, most.

What appears to happen, all too often, is that 'industrial era' practices are applied to 'knowledge work' activities and objective purposes; but its not the same.

The consequence when employed persons seek to take others 'knowledge work' as a resource to exploit for their own gainful purposes is that outcomes are both different & less certain (risk). Part of what these systems will in-effect scale to achieve, is to identify 'submarine risks'; and in-turn also, act to support the means to go through and better evaluate the costs associated with serious wrong-doings; both, from an opportunity cost & broadly moreover TCO (Total Cost of Ownership).

Knowledge work implicitly requires a level of creativity that associates with a person's character and who they are as a person; this cannot be 'obtained' by stealing derivative works.

To suggest otherwise; is to suggest that the basis upon which intellectual property registries exist (ie: patent offices, etc); is entirely unnecessary because at all stages its 'all been done already'; and in-turn also, that our memory of 'inventors' and artists; that the merits of any form of work, is without an appropriate basis in reality; which is of course absurd, but nonetheless the consequence of the models advocated for by some, beneficiaries.

To address these sorts of issues; is extremely difficult, and complex. Yet the outcomes are considered essential requirements to support the growth of humanitarian solutions to address our biosphere, sociosphere and broader needs as a human family.

Why 'eCash'? What is it?

https://e.cash/ | https://avalanche.cash/ is a form of 'bitcoin' based solution that is in its early stages of development; whilst also being built upon, the bitcoin ecosystem works of which some involved in eCash (XEC) were also involved. Since then, an array of advancements have been made; in particular, the "Snowflake to Avalanche: A Novel Metastable Consensus Protocol Family for Cryptocurrencies" paper[1]. eCash has shifted the denomination of bitcoin from having 8 decimal places (ie: 0.00000000) to having 2 decimal places (0.00); which also leads to the total number of 'coins' appearing to be 21 trillion, rather than 21 million. eCash is advancing the ability to perform transactions in seconds, which means it can be used at 'point of sale' like use-cases. Additionally, the transaction costs are set to be very low (~5.46xec) and the nominal value of XEC (eCash) offers massive opportunities for micropayments use-cases.

The eCash ecosystem also offers a variety of 'eToken' capacities; as well as 'smart contract' facilities as has previously been developed for bitcoin ecosystems, of which this is based.

Historically also, work to define 'rwwcoin' and similar; in relation to the 'rww' (solid) ecosystem; was historically based upon bitcoin variants; which may still be usefully employed. Finally, the definition of 'identity', as to be defined by a 'wallet' - is incorporated into the structures of other systems, that are often known as SSI or similar. Whereas, the systems that are sought to support #HumanCentricAI, whilst requiring some form of 'vault', to support personal cryptography; the applied definition of 'human identity' is not defined by a 'wallet'. Whilst the explanation of these alternatives is very difficult, the underlying implication is that the law-enforcement capabilities are not based upon how much a person is worth (their wallet); but rather, based upon what people DO in reality.

To achieve these sorts of outcomes; requires a different kind of ecosystem, whereby the status, characteristics and designs of eCash appears to be uniquely well suited to support.

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[1] https://ipfs.io/ipfs/QmUy4jh5mGNZvLkjies1RWM4YuvJh5o2FYopNPVYwrRVGV

Human Centric AI

So, human centric AI is about personal and private 'Ai Agents' that support the needs of individual human beings; and through that foundational basis thereby being established, the means for people to be associated to what they do, in groups, with commons, etc.

This requires an array of related requirements; that are yet to be produced, but are intended to support declarative semantics / logical programming; natural language ontologies, and an array of other functional requirements, that are different to other systems. This then, requires a lot of development; but may well end-up extending the existing functionality of a 'wallet' app; to provide a more comprehensive 'vault' interface, and local support for informatics governance systems, which become - human centric.

Mountains of Development Work

The sheer volume of 'digital' humanitarian works needed to be done, is overwhelming. The internet does not support all languages of our human family; our means to form understandings about our natural world is presently fairly impaired; there are many species we do not know about, let alone, providing the means for people to know how to make use of natural agents for medicinal and/or functional health purposes. Whilst we can share just about anything online; and to do so, we pay to buy 'things' such as devices, and we pay for the online services required to provide us the capacity to interact online; but we don't have a means to pay even a tiny fraction of a cent, or a percentage of our overall ICT costs to support the lives of others whose works we employ via online sources, for our lives; and, our means to support good projects elsewhere, with confidence, is now not as good as anyone may otherwise hope.

Background: In Conclusion,

Part of this is about the 'identity' issue, other parts are about the 'platform' and various other controls; but to solve those issues, we need to define solutions that do not depend upon 'digital slavery' which is only hard to fix; because, others have chosen not to historically, as such, these solutions are in turn truly innovative. There is a false belief, that the human rights of persons need to be 'sold' in-trade for providing support for 'human rights', which is overall a logical nonsense; but the consequence of what it is we have today.

To address these issues, we need to figure out how to do it. This document is about trying to figure out how to craft an initial solution; that can be employed now, to provide recognition and support for those who are involved in helping to forge solutions. This is not considered to be something that we will be able to provide 'market-rates' now to support; but rather, that we work to figure out how to provide mechanisms that act to support some form of trade, rights, and perhaps - if eCash ends-up successful, it may well end-up providing a significant 'return on investment' in time, if participants keep their 'coins' and the value increases, assuming that the project is indeed also, successful.

However, if eCash is not successful, then it is the method statement that becomes useful..

Goals

Technical

1. There is presently a large volume of works that 'could be done', but there is not presently a way to fund the cost of doing those works.

   This project seeks to address that problem.

2. Tools: there are existing tools, that were developed for BCH that now need to be updated; for example,

   a. Electronic Contracts: https://github.com/samrock5000/cashscript

   b. Tokens: https://github.com/simpleledger

3. Technical & Accounting means to support value transactions; of different kinds, in different ways.

4. Methods to ensure people are not defined by a particular blockchain 'identifier'

5. Privacy & the means to assert & manage 'wallet' addresses placed upon 'things'.

6. Means to create valuation models that are inclusively considerate of resources.

7. *NB: There are means to use cryptography to support 'drm' methods for resources.*

Economics NOT Human Identity! (human centric ai)

Part of the technical goal and related purposes directly relate to support for human rights; both, as has been considered at the time prior to broadband and Advanced AI systems; and, now most importantly - at this time, as is consequential to these intents and purposes.

What this means; is that, the technical systems required to support human beings, support for 'selfhood' and 'personhood', are different to the specific needs required to support payments.

They are indisputably coupled; there is a direct relationship between socioeconomic participation and the meaningful support of a person's human rights; but they are not the same. The requirements for human beings to be properly supported in this emergent age of digital records that define life; that is then influenced by artificial agents (software / ai), is complex; and these requirements, are not entirely supported by the definitive needs of systems that are more specifically designed to support the functional requirements of economics.

Therein; one of the TECHNICAL GOALS is to ensure that the ecosystems are designed in a way that can support Human Centric AI systems specifically; noting, that there is a specific definition about what these systems do, how they operate, how they are constructed; and what the term is intended to mean, that relates to supports to promote and preserve, human rights.

What this means; is that the use of decentralised systems based on standards, that can support both interoperability and the ability to migrate between providers (as to support meaningful 'ownership' of ones records / digital - human agency) requires particular tech.

Social

8. Purchasing Power Parity (PPP): considerations need to be made about cost of living.

9. Effort, Quality, Skills: and other qualities that should be applied to different types of 'knowledge work'.

10. Implied & causal inferences; whereby what people do, acts to shape 'what they know'; which may in-turn, have meaningful implications with respect to qualifications and recognition of prior learning, etc.

11. Ontological Definitions of different types of 'value' measurements; including,

    a. Biosphere
    b. Sociosphere
    c. Energy
    d. Categorisations

12. Negative 'Currencies': should they exist? One example is:
    https://twitter.com/WebCivics/status/1702957997788659846

    The thing about 'negative currencies' may well be, that it is important to carry the 'bet' (or 'assertion') through to a particular point in time; where the outcome is then able to be resolved. Rule of Law requires determination of the facts; and support for the notion of being guilty until proven innocent, so this is different to 'claims'.

    In other areas of 'negative currencies' could also be; negative impacts upon the environment; or, tokens that seek to encourage recycling, that are depended at the end of the useful life of a product (ie: a laptop, or plastic bottle, etc.).

    Another interesting problem; is how to address the issue of people lodging the work of others as their own; which is in-effect, a false claim. The implications are impactful with respect to intellectual property; as well as, whether that person knows anything about it and/or how to fix it. The cost of these sorts of false-claims, can ruin otherwise good projects; in-effect, it is a form of threat-vector, that could be addressed economically.

13. Data-Collars: the means to associate identifiers with 'things', etc.
    Data-Collars have a particular role to play; whilst being considered improper, for many other applications that other people / systems / initiatives, may seek to use them for; As this is a complex problem, a separate document[2] is being produced to seek to address it.

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[2]
https://docs.google.com/document/d/1WcUxJ9Fpii20Zeq3CHE4AbvsK3Pot_qh52PfYzbwhtg/edit

Future Purpose: Peace Infrastructure Projects

There are many 'peace infrastructure projects' that relate to the advancement of the lives of others via works that promote the delivery of SDGs towards a 'Medicinal Earth', and in-turn also the health, mental wealth and many other positive outcomes for humanity.

As has been described:
https://lists.w3.org/Archives/Public/public-humancentricai/2023Sep/0000.html

The challenge in this project, is the figure out how to form the foundational requirements in a way that can properly scale to become far greater; without, corrupt foundations, as may be considered morally and/or otherwise.

These systems should not act to define people as a wallet; but rather, support the means to associate what work people do; with the associative benefits and/or responsibilities associated with that work and its outcomes. In some cases, these use-cases will in-fact relate to the outcomes associated to the work, not simply the economics of the time.

Such considerations have been made in relation to the 'crowd versity' concept which whilst applied in relation to the means through which people may respond to what they consider to be 'fake news', technically otherwise; leads to various other implications & use-cases.

Specifications Notes

This is expected to result in a solution of some-sort, that is able to be made PRIOR TO the ability to produce the 'human centric ai' systems themselves; which, are expected to be one of the key projects associated with the use of these systems, to support its development.

Furthermore; the design of these ecosystems should not produce any unnecessary 'lock-ins' to any group or foreign entity that may otherwise seek control over human lives.

There are an array of different types of protocols that exist; some private, public, able to support permissive use (ie: privileged); some immutable, some unable to modify records; others temporary and/or able to be deleted; and yet others still, able to support linked versions of resources associated to or with the a series of linked resources.

There is a need to evaluate and ontologically define what properties are most appropriate for what types of transactional events. What is thought most-likely also, is that the tooling is perhaps best done by seeking to employ Solid and eCash components such as cashtab.

Economic Systems - Introductory notes

There are many profound fears about 'social credit systems', and these fears are valid.

Yet the difference between something that is evil; vs. something that is not, is about how it is created. In this case, the challenge is about creating tooling to address the evil that exists in our present-day 'social credit system' where it doesn't really matter how someone makes money; just whether or not they've got more of it, as does in-turn act to benefit people who engage in human rights crimes; whilst simultaneously, acting to limit or negate the rights of

persons, particularly when they're doing some form of work activity that seeks to deliver something that is good for others, humanity, etc…

Therein, whilst the use of terms and the consequential functional meaning that is historically appended to those terms; has historically been 'loose', ESG stands for Environmental, Social, and Governance. It is a set of criteria used to evaluate the sustainability and societal impact of an investment. These systems seek to take into consideration the functional characteristics of how things are achieved, and by whom.

ESG criteria are often used by investors as a way to evaluate the sustainability and long-term performance of an investment, and to ensure that their investments align with their values and priorities.

1. Environmental criteria consider how a company or investment impacts the natural environment, including its carbon emissions, waste management practices, and use of natural resources.

2. Social criteria consider how a company or investment impacts society, including its labour practices, human rights record, and impact on communities.

3. Governance criteria consider how a company or investment is governed, including its leadership, executive compensation, and transparency.

Some investors may also use ESG criteria to assess the potential risks and opportunities associated with an investment. Importantly also, these ESG related considerations also provide some of the financial and/or economic rationale that can be employed to support the human rights of persons whose activities are historically more about 'non-financial currencies' and related efforts and considerations; that could be 'bought' & compensated.

Another aspect of importance is that we have a constant need to figure out how to use technology and resources (biosphere / sociosphere / physics (ie: time/energy)) more effectively than we have otherwise demonstrated a capacity to do, earlier. ESG considerations provide part of the founding basis upon which calculations can be made.

Resources

Activities are thought best defined in terms of the 'topic', 'purpose' or project any such activity type requires resources to create or contribute towards via the supply of,

1. Useful Knowledge Work and/or Labour Work

2. Financial Resources (ie: cash)

3. Equipment and Supplies

4. Intellectual Property

5. Resources

Historical Definition

Resources are any materials, assets, or inputs that are used to produce goods or services. They can be physical or intangible, and may include raw materials, labour, capital, land, and information. In economics, resources are typically classified into four categories: land, labour, capital, and entrepreneurship.

Land refers to natural resources, such as minerals, oil, and timber. Labour refers to the human effort that goes into producing goods and services. Capital refers to the financial resources, such as money and equipment, that are used to produce goods and services. Entrepreneurship refers to the ability and willingness to take on risk and organise the other factors of production.

In addition to these traditional categories, other resources may include technological resources, such as software and equipment, and intangible resources, such as intellectual property and reputation. The availability and effective use of resources can be a key factor in the production and distribution of goods and services.

Updated Considerations

The implication of these works in-effect seek to reduce barriers for people being able to just simply find something useful to do (work); and then, simply go about doing it. If those contributions are indeed use-ful; then,

- Reasonable 'claims' for 'fair terms' for compensation in relation to their useful works, should be something that can be achieved; as does in-turn,
- Leads to the outcome of producing 'obligation free' outcomes, that are free from digital slavery.

In-turn also; people may simply elect to provide resources towards some sort of cause they think important; and so long as those causes have clearly stated goals that are actually being done - then this should also be something that is 'allowed' & recognised.

These considerations are in-turn intended to support a framework that is in-effect, compatible with the sentiments expressed by Human Rights charters as well as other instruments of note, such as the Fundamental Charter of Christian Ethical Finance.

In these models, 'knowledge work' is considered to be a form of resource, that is then dependent upon the use of other resources; such as, the use of the internet, computing hardware & software, etc. Thereafter also, the production of 'knowledge capital' that is implicitly supported through the use of good provenance information, does in-turn lead to a divarication of biosphere, socio-sphere and socio-economic instruments; that are broader than as may be simply be defined as 'money'...

This could or would result in the character of a person being associated with the positive outcomes that they have managed to participate in; as is sought to become amongst the 'verifiable claims' that those people can usefully employ, should they want to.

These considerations have many impactful consequences upon the dignity & rights of persons; which are of particular note, in relation to the character of who & what we do.

I. Contribution Classifications

There is a need to create categories in relation to the types of contributions made. Some may be as simple as a small change, that takes a few seconds; others, may represent on-going works over a long-period of time; that has involved great sacrifice & attention.

In some cases also; contributions may be specifically requested; whilst others, may just be an idea or something that someone thought was a 'good idea', and they just did it.   The means to create formula around how to address the characteristics of any, requires the framework to be defined; here are some initial thoughts,

A. **Necessary contributions:** These are contributions that are identified as necessary for the successful completion of a project. They may involve tasks or responsibilities that are specifically assigned to individuals or that are essential for the project to move forward.

B. **Unsolicited contributions:** These are contributions that are made by individuals without being specifically requested or assigned. They may be undertaken on a volunteer basis or as part of an individual's personal interest in the project.

C. **Valued contributions:** These are contributions that are considered to be particularly valuable or beneficial to the project. They may be identified through feedback or evaluation processes, or through other means of assessment.

D. **Collaborative contributions:** These are contributions that involve collaboration or teamwork with others. They may involve the exchange of ideas, the sharing of resources or expertise, or other forms of collaboration.

E. **Time-limited contributions:** These are contributions that are made on a temporary or short-term basis. They may involve tasks or responsibilities that are specific to a particular phase or stage of the project, or that are completed within a specific timeframe.

F. **Ongoing contributions:** These are contributions that are made on a more long-term or ongoing basis. They may involve tasks or responsibilities that are ongoing or that are expected to continue over a longer period of time.

G. **Discrete contributions:** These are contributions that are self-contained or that can be completed independently of other contributions. They may involve tasks or responsibilities that are discrete or that can be completed on a standalone basis.

H. **Interdependent contributions:** These are contributions that are dependent on or interconnected with other contributions. They may involve tasks or responsibilities that rely on the work of others in order to be completed or that are part of a larger system or process.

I. **Different types of work:** This classification could involve subcategories for different types of tasks or responsibilities, such as design work, research, programming, testing, etc.

J. **Contributions of resources or equipment and supplies:** This classification could involve subcategories for different types of resources or supplies that are contributed to the project, such as software, hardware, data, etc.

K. **Contributions of intellectual property:** This classification could involve subcategories for different types of intellectual property contributions, such as patents, trademarks, copyrights, etc.

L. **Contributions on defined terms:** This classification could involve subcategories for contributions that are made on specific terms or conditions, such as contributions made under a particular licence or agreement.

M. **Expertise-based contributions:** This classification could involve subcategories for contributions that are based on specific expertise or skills, such as contributions of knowledge or expertise in a particular field or domain.

N. **Role-based contributions:** This classification could involve subcategories for contributions that are related to specific roles or responsibilities, such as contributions made by project managers, team leaders, or other key stakeholders.

O. **Collaborative contributions:** This classification could involve subcategories for contributions that involve collaboration or teamwork with others, such as contributions that involve the exchange of ideas or the sharing of resources or expertise.

P. **Standalone contributions:** This classification could involve subcategories for contributions that are self-contained or that can be completed independently of other contributions, such as contributions that are discrete or that can be completed on a standalone basis.

II.   Financial and non-financial currencies

There are many different types of 'transactional events' that can be associated with instruments of some-kind, that may directly or indirectly result in payments or different forms of acknowledgement or other related socio-economic methods, measures & supports. These systems are made in various contexts, including: which are hereby provided some basic initial outlines, per below. These works will in-turn need to be transcribed into a functional technical system & related modelling, built using ontologies, various forms of cryptographic instruments and related tooling; including, blockchain tools.

Financial

General

1. **Micro Payments**: These are small payments that are typically made online and are used to purchase digital goods or services. They are often used for low-cost items or for items that are purchased frequently, such as online articles or music tracks.

    Micropayment systems are a critical component of how the requirements for various systems are going to be made able to work. However the design of these systems must consider various ESG factors - which is part of what the intention of ensuring support for

micropayments does innately; but that also, the Biosphere Ontologies and in-particular Energy Calcs become critically important.

The way through which micropayment mechanisms are made able to work, must end-up costing less than the amount of the payment.

2. **Gifts And Donations**: These are payments that are made without the expectation of receiving something in return. Gifts are typically given to show affection or appreciation, while donations are often made to support a particular cause or organisation. There are a few key differences between gifts and donations:

   a. **Purpose**: Gifts are typically given for personal reasons, such as to show appreciation or affection, while donations are typically given to support a particular cause or organisation.

   b. **Recipient**: Gifts are typically given to individuals, while donations are typically given to organisations or causes.

   c. **Tax implications**: In some cases, gifts may be subject to gift tax, depending on the value of the gift and the relationship between the giver and the recipient. Donations, on the other hand, may be tax-deductible in some cases, depending on the nature of the organisation receiving the donation and the specific tax laws in the giver's jurisdiction.

   d. **Expectation of return**: Gifts are typically given without any expectation of receiving anything in return, while donations may be given in exchange for certain benefits, such as recognition or access to special events or resources.

Gifts and Donations differ in terms of their purpose, recipient, and potential tax implications; but are both forms of voluntary payments that are made freely and without any expectation of receiving anything in return.

3. **Subscription payments**: These are payments that are made on a regular basis, such as monthly or annually, in exchange for access to a particular service or product.

4. **Instalment payments**: These are payments that are made over a period of time, rather than in a single lump sum. They may be used to purchase larger items or services, such as a car or a home.

5. **Salary or wages**: These are payments that are made to employees in exchange for their work. They may be based on an hourly rate, a yearly salary, or some other form of compensation.

6. **Royalties**: These are payments that are made to individuals or organisations for the use of their intellectual property, such as patents, trademarks, or copyrights.

7. **Licensing fees**: These are payments that are made in exchange for the right to use a particular product or service. They may be paid on a one-time basis or on a regular basis, such as annually.

8. **Commission**: These are payments that are made to individuals or organisations for their efforts in selling a product or service. They may be based on a percentage of the sale price or on some other form of compensation.

9. **Dividends**: These are payments that are made to shareholders in a company as a distribution of the company's profits.

10. **Rent**: These are payments that are made in exchange for the use of a particular property, such as an apartment or a piece of land.

11. **Loans**: These are payments that are made to individuals or organisations to borrow money, with the expectation that the money will be repaid with interest at a later date.

12. **Grants**: These are payments that are made to individuals or organisations to support a particular project or initiative. Grants may be provided by government agencies, foundations, or other organisations and may have specific terms and conditions attached to their use.

13. **Scholarships**: These are payments that are made to students to help cover the cost of education. Scholarships may be based on merit, financial need, or other criteria and may be provided by schools, universities, or other organisations.

14. **Bursaries**: These are payments that are made to students to help cover the cost of education and are typically based on financial need. Bursaries may be provided by schools, universities, or other organisations.

15. **Insurance payments**: These are payments that are made by individuals or organisations to cover the cost of insurance premiums. Insurance payments may be made on a regular basis, such as monthly or annually, and may cover a wide range of risks, including health, property, and liability.

16. **Tips**: These are payments that are made to individuals who provide a service, such as a waiter, hairdresser, or taxi driver. Tips are typically given as a way to show appreciation or gratitude for good service.

Taxation

17. **Sales tax**: These are payments that are made on the purchase of goods or services and are typically collected by the seller on behalf of the government. Sales tax rates vary by jurisdiction and may be based on a percentage of the purchase price.

18. **Value-added tax (VAT)**: This is a type of consumption tax that is applied to the sale of goods and services. VAT rates vary by jurisdiction and may be based on a percentage of the sale price.

19. **Property tax**: These are payments that are made on the ownership of property, such as a home or a piece of land. Property tax rates vary by jurisdiction and may be based on the value of the property.

20. **Business tax**: These are payments that are made by businesses on the profits or income they generate. Business tax rates vary by jurisdiction and may be based on a percentage of the business's profits or income.

21. **Personal tax**: These are payments that are made by individuals on their income or wealth. Personal tax rates vary by jurisdiction and may be based on a progressive scale, with higher rates applying to higher levels of income or wealth.

22. **Excise tax**: These are taxes that are applied to specific goods or services, such as gasoline, tobacco, or alcohol. Excise tax rates may vary by jurisdiction and may be based on the quantity or value of the goods or services.

23. **Import tax**: These are taxes that are applied to goods that are imported into a country. Import tax rates may vary by jurisdiction and may be based on the value or quantity of the goods being imported.

24. **Export tax**: These are taxes that are applied to goods that are exported from a country. Export tax rates may vary by jurisdiction and may be based on the value or quantity of the goods being exported.

25. **Payroll tax**: These are taxes that are applied to the wages or salaries of employees and are typically collected by the employer on behalf of the government. Payroll tax rates may vary by jurisdiction and may be based on a percentage of the employee's wages or salary.

Fees

26. **Usage fees**: These are fees that are charged for the use of a particular service or product. Usage fees may be based on the amount of time or resources used or on some other metric.

27. **Transaction fees**: These are fees that are charged for processing a financial transaction, such as a credit card payment or a bank transfer. Transaction fees may be based on a percentage of the transaction amount or on a flat rate.

28. **Service charges**: These are fees that are charged for services rendered, such as legal or consulting services. Service charges may be based on an hourly rate or on a flat fee.

29. **Membership fees**: These are fees that are charged for membership in a particular organisation or club. Membership fees may be based on a flat rate or on a recurring basis, such as annually.

30. **Penalty fees**: These are fees that are charged for failing to meet certain obligations or requirements, such as late payment fees or overdraft fees.

31. **Court fees**: These are fees that are charged for the use of court facilities or for other legal services. Court fees may be based on a flat rate or on a percentage of the amount in dispute.

32. **Registration fees**: These are fees that are charged for the registration of a particular item, such as a vehicle or a trademark. Registration fees may be based on a flat rate or on a percentage of the value of the item being registered.

33. **Permit fees**: These are fees that are charged for the issuance of a permit, such as a building permit or a hunting or fishing licence. Permit fees may be based on a flat rate or on a percentage of the value of the activity being permitted.

34. **Access fees**: These are fees that are charged for access to a particular service or resource, such as an online database or a gym membership. Access fees may be based on a flat rate or on a recurring basis, such as monthly.

35. **Transfer fees**: These are fees that are charged for the transfer of a particular asset or liability, such as a real estate transaction or a stock trade. Transfer fees may be based on a flat rate or on a percentage of the value of the asset or liability being transferred.

36. **Processing fees**: These are fees that are charged for the processing of a particular request or application, such as a passport application or a loan application. Processing fees may be based on a flat rate or on a percentage of the value of the request or application.

37. **Maintenance fees**: These are fees that are charged for the maintenance or upkeep of a particular asset or service, such as a software subscription or a gym membership. Maintenance fees may be based on a flat rate or on a recurring basis, such as annually.

38. **Upgrade fees**: These are fees that are charged for the upgrade of a particular product or service, such as a software upgrade or a cell phone plan upgrade. Upgrade fees may be based on a flat rate or on a percentage of the value of the upgrade.

39. **Exit fees**: These are fees that are charged for the termination of a particular service or contract, such as a cell phone contract or a rental agreement. Exit fees may be based on a flat rate or on a percentage of the value of the service or contract.

40. **Penalty interest**: These are additional interest charges that are applied when a payment is late or when a financial obligation is not met. Penalty interest rates may be based on a percentage of the unpaid amount or on a flat rate.

41. **Late fees**: These are fees that are charged for the late payment of a particular obligation, such as a rent payment or a credit card payment. Late fees may be based on a flat rate or on a percentage of the unpaid amount.

42. **Overdue fees**: These are fees that are charged for the failure to return an item by a certain date, such as a library book or a rented movie. Overdue fees may be based on a flat rate or on a daily or weekly basis.

43. **Restocking fees**: These are fees that are charged for the return of a product that has been opened or used, such as a software program or an electronic device. Restocking fees may be based on a percentage of the purchase price or on a flat rate.

44. **Service charges**: These are fees that are charged for the use of a particular service, such as a hotel room service charge or a restaurant service charge. Service charges may be based on a percentage of the total bill or on a flat rate.

45. **Credit card fees**: These are fees that are charged for the use of a credit card, such as annual fees, balance transfer fees, or cash advance fees. Credit card fees may be based on a flat rate or on a percentage of the transaction amount.

Other

46. **Security deposits**: These are payments that are made upfront to secure the use of a particular asset or service, such as a rental property or a storage unit. Security deposits may be refundable or non-refundable, depending on the terms of the agreement.

47. **Rent payments**: These are payments that are made for the use of a particular property, such as a home or an office. Rent payments may be based on a flat rate or on a percentage of the value of the property.

48. **Lease payments**: These are payments that are made for the use of a particular asset, such as a car or equipment. Lease payments may be based on a flat rate or on a percentage of the value of the asset.

49. **Loan payments**: These are payments that are made to repay a loan, such as a mortgage or a personal loan. Loan payments may be based on a fixed interest rate or on a variable interest rate.

50. **Utility payments**: These are payments that are made for the use of a particular service, such as electricity, water, or gas. Utility payments may be based on a flat rate or on a usage-based rate.

51. **Dues**: These are payments that are made for membership in an organisation or association, such as a professional association or a social club. Dues may be based on a flat rate or on a recurring basis, such as annually.

Overall, there are many different types of payments that can be made in various contexts, depending on the specific needs and circumstances of the parties involved.

Non-Financial

(Knowledge Economy 'Currencies')

There are many types of non-financial currencies that can be used in place of traditional financial currencies, such as dollars, euros, or pounds. Non-financial currencies can take a variety of forms and can be used for a variety of purposes.

It is worth noting that non-financial currencies can be used in a variety of ways and can have a variety of benefits. For example, non-financial currencies may:

- Provide an alternative means of exchange in situations where traditional financial currencies are not available or are not practical.

- Encourage local economic development and community building by promoting trade within a specific community or region.

- Foster loyalty and reward customer behaviour.

- Create new opportunities for innovation and experimentation with different forms of value exchange.

Traditionally; non-financial currencies have also had an array of limitations and challenges.

For example:

- Be subject to fraud or abuse.

- Be difficult to track and audit.

- Be subject to volatility and fluctuation in value.

- Be subject to regulation and oversight by governments or other authorities.

As such, whilst non-financial currencies can be a useful and innovative way to exchange value and facilitate transactions, it is important to carefully consider the potential benefits and challenges before implementing them. One of the more significant recent examples is Carbon Credits. Carbon credits are a type of non-financial currency that can be bought and sold as a way to offset carbon dioxide emissions. Carbon credits are used as a way to incentivize the reduction of greenhouse gas emissions and to promote the adoption of clean energy technologies.

Under a carbon credit system, a government or other authority sets a cap on the amount of carbon dioxide that can be emitted within a specific region or sector. Companies or other organisations that exceed their allocated carbon emissions are required to purchase carbon credits from those that have emitted less than their allocated amount. This creates a market for carbon credits, with the goal of reducing overall carbon dioxide emissions and incentivizing the adoption of clean energy technologies.

Carbon credits can be bought and sold on carbon markets, such as the European Union Emissions Trading System (EU ETS) or the Chicago Climate Exchange (CCX). The value of carbon credits is typically based on the cost of reducing or offsetting a ton of carbon dioxide emissions.

Overall, carbon credits are a way to use market forces to encourage the reduction of greenhouse gas emissions and the adoption of clean energy technologies.

Some other examples of non-financial currencies might include:

52. **Time banks**: Time banks are systems in which people exchange services with one another, using time as the currency. For example, someone might trade an hour of gardening for an hour of computer repair.

53. **Loyalty points**: Many businesses offer loyalty points as a way to reward customer loyalty. These points can be redeemed for goods or services at a later date.

54. **Social currency:** Social currency refers to the value that is derived from social connections or relationships. For example, someone might offer a favour to a friend in exchange for a favour at a later date.

55. **Alternative currencies**: Alternative currencies are currencies that are created and used outside of the traditional financial system. Examples might include barter systems or digital currencies such as Bitcoin.

56. **Reputation points**: Some online communities use reputation points as a way to reward and recognize contributions. These points might be visible on a user's profile or might be used to unlock special privileges or perks.

57. **Coupons**: Coupons are a type of non-financial currency that can be exchanged for goods or services at a later date. Coupons may be issued by businesses or may be obtained through loyalty programs or other promotions.

58. **Gift cards**: Gift cards are a type of non-financial currency that can be used to purchase goods or services at a later date. Gift cards may be issued by businesses or may be purchased by individuals as a gift for someone else.

59. **Air miles**: Air miles are a type of non-financial currency that can be earned through the use of certain credit cards or loyalty programs. Air miles can be redeemed for flights or other travel-related benefits.

60. **Points**: Points are a type of non-financial currency that can be earned through the use of certain credit cards, loyalty programs, or other promotions. Points can be redeemed for a variety of goods and services, such as merchandise, gift cards, or travel-related benefits.

61. **Credits**: Credits are a type of non-financial currency that can be earned through the use of certain online platforms or services. Credits can be used to purchase goods or services within the platform or may be exchangeable for other types of currencies.

62. **Tickets**: Tickets are a type of non-financial currency that can be exchanged for goods or services at a later date. Tickets may be used to purchase admission to events, such as concerts or sporting events, or to access certain amenities, such as amusement park rides.

63. **Vouchers**: Vouchers are a type of non-financial currency that can be exchanged for goods or services at a later date. Vouchers may be issued by businesses or may be obtained through loyalty programs or other promotions.

64. **Tokens**: Tokens are a type of non-financial currency that can be used to purchase goods or services within a specific context, such as at a carnival or an arcade.

65. **Community currencies**: Community currencies are a type of non-financial currency that is used within a specific community or region. These currencies may be used to facilitate trade or to promote local economic development.

66. **Virtual currencies**: Virtual currencies are a type of non-financial currency that exists entirely online. Examples might include digital currencies such as Bitcoin or in-game currencies used within online gaming platforms.

Biosphere

There are many types of non-financial currencies that are related to the biosphere or the natural environment. Some examples might include:

67. **Water credits:** Water credits are a type of non-financial currency that can be bought and sold as a way to incentivize the efficient use of water resources. Water credits may be used to allocate water rights or to offset water use in different regions or sectors.

68. **Biodiversity credits:** Biodiversity credits are a type of non-financial currency that can be bought and sold as a way to incentivize the conservation of biodiversity and the protection of ecosystems. Biodiversity credits may be used to offset the impact of development projects or to reward the implementation of conservation measures.

69. **Carbon offset credits:** Carbon offset credits are a type of non-financial currency that can be bought and sold as a way to offset carbon dioxide emissions. Carbon offset credits may be used to offset the carbon emissions of a specific project or activity by supporting the implementation of carbon reduction projects elsewhere.

70. **Ecological credits:** Ecological credits are a type of non-financial currency that can be bought and sold as a way to incentivize the restoration and protection of ecosystems. Ecological credits may be used to offset the impact of development projects or to reward the implementation of conservation measures.

71. **Nature credits:** Nature credits are a type of non-financial currency that can be bought and sold as a way to incentivize the conservation of natural resources and the protection of the environment. Nature credits may be used to offset the impact of development projects or to reward the implementation of conservation measures.

72. **Eco-points:** Eco-points are a type of non-financial currency that can be earned through the adoption of environmentally-friendly behaviours or the use of eco-friendly products. Eco-points may be redeemable for a variety of goods and services or may be used to unlock special privileges or perks.

73. **Green dollars:** Green dollars are a type of non-financial currency that is used within a specific community or region to promote local economic development and sustainability. Green dollars may be earned through the adoption of environmentally-friendly behaviours or the use of eco-friendly products and may be used to purchase goods and services within the community.

74. **Renewable energy credits:** Renewable energy credits are a type of non-financial currency that can be bought and sold as a way to incentivize the adoption of renewable energy technologies. Renewable energy credits may be used to offset the use of non-renewable energy sources or to reward the generation of renewable energy.

75. **Waste credits:** Waste credits are a type of non-financial currency that can be bought and sold as a way to incentivize the reduction of waste and the adoption of recycling and other waste management practices. Waste credits may be used to offset the generation of waste or to reward the implementation of waste reduction measures.

76. **Green bonds**: Green bonds are a type of financial instrument that is used to raise capital for environmental projects or initiatives. Green bonds may be issued by governments, businesses, or other organisations and may be used to finance a variety of projects, such as renewable energy projects or conservation efforts.

77. **Carbon offsets:** Carbon offsets are a type of non-financial currency that can be bought and sold as a way to offset carbon dioxide emissions. Carbon offsets may be used to offset the carbon emissions of a specific project or activity by supporting the implementation of carbon reduction projects elsewhere.

78. **Eco-tokens:** Eco-tokens are a type of non-financial currency that is used to reward the adoption of environmentally-friendly behaviours or the use of eco-friendly products. Eco-tokens may be redeemable for a variety of goods and services or may be used to unlock special privileges or perks.

79. **Carbon credits for soil carbon sequestration:** Carbon credits could be used to incentivize the adoption of practices that sequester carbon in soil, such as regenerative agriculture or agroforestry.

80. **Water quality credits:** Water quality credits could be used to incentivize the improvement of water quality in lakes, rivers, and other water bodies.

81. **Habitat credits:** Habitat credits could be used to incentivize the creation or restoration of habitat for endangered species or other wildlife.

82. **Ecosystem services credits:** Ecosystem services credits could be used to incentivize the protection of natural systems that provide important benefits to humans, such as flood control, air purification, or pollination.

Within the sphere of 'knowledge based currencies', non-financial biosphere-related instruments can be useful to incentivize the conservation of natural resources and protection of our biosphere environment, as well as to promote the adoption of sustainable practices, through the use of technologies that provide a means to value it.

SocioSphere

Non-financial sociosphere currencies are a type of non-financial currency that is used to incentivize the adoption of socially-beneficial behaviours or the use of socially-beneficial products and services. Some examples of non-financial sociosphere currencies might include:

83. **Social impact bonds:** Social impact bonds are a type of financial instrument that is used to raise capital for social projects or initiatives. Social impact bonds may be issued by governments, businesses, or other organisations and may be used to finance a variety of projects, such as education initiatives or social services programs.

84. **Volunteer credits:** Volunteer credits are a type of non-financial currency that is earned through volunteering or other forms of community service. Volunteer credits may be redeemable for a variety of goods and services or may be used to unlock special privileges or perks.

85. **Time banks:** Time banks are a type of non-financial currency that is used to exchange services within a community. Time banks may be based on the concept of time credits, with each hour of service earning one time credit that can be used to receive a service from another member of the time bank.

86. **Community service credits:** Community service credits are a type of non-financial currency that is earned through the completion of community service projects or other forms of volunteering. Community service credits may be redeemable for a variety of goods and services or may be used to unlock special privileges or perks.

87. **Social points:** Social points are a type of non-financial currency that is earned through the adoption of socially-beneficial behaviours or the use of socially-beneficial products. Social points may be redeemable for a variety of goods and services or may be used to unlock special privileges or perks.

88. **Community currency:** Community currency is a type of non-financial currency that is used within a specific community or region to promote local economic development and social cohesion. Community currency may be earned through the adoption of socially-beneficial behaviours or the use of socially-beneficial products and may be used to purchase goods and services within the community.

89. **Social capital credits:** Social capital credits are a type of non-financial currency that is earned through the participation in social or community activities. Social capital credits may be redeemable for a variety of goods and services or may be used to unlock special privileges or perks.

90. **Impact tokens:** Impact tokens are a type of non-financial currency that is used to reward the adoption of socially-beneficial behaviours or the use of socially-beneficial products. Impact tokens may be redeemable for a variety of goods and services or may be used to unlock special privileges or perks.

91. **Good deeds credits:** Good deeds credits are a type of non-financial currency that is earned through the completion of good deeds or acts of kindness. Good deeds credits may be redeemable for a variety of goods and services or may be used to unlock special privileges or perks.

92. **Social impact tokens**: Social impact tokens are a type of non-financial currency that is used to reward the adoption of socially-beneficial behaviours or the use of socially-beneficial products. Social impact tokens may be redeemable for a variety of goods and services or may be used to unlock special privileges or perks.

93. **Community service points:** Community service points are a type of non-financial currency that is earned through the completion of community service projects or other forms of volunteering. Community service points may be redeemable for a variety of goods and services or may be used to unlock special privileges or perks.

94. **Social action credits**: Social action credits are a type of non-financial currency that is earned through the participation in social or community activities. Social action credits may

be redeemable for a variety of goods and services or may be used to unlock special privileges or perks.

95. **Social responsibility credits:** Social responsibility credits are a type of non-financial currency that is earned through the adoption of socially-responsible behaviours or the use of socially-responsible products. Social responsibility credits may be redeemable for a variety of goods and services or may be used to unlock special privileges or perks.

96. **Impact points:** Impact points are a type of non-financial currency that is earned through the adoption of behaviours or the use of products that have a positive impact on society or the environment. Impact points may be redeemable for a variety of goods and services or may be used to unlock special privileges or perks.

97. **Social enterprise credits:** Social enterprise credits are a type of non-financial currency that is earned through the support of socially-conscious businesses or organisations. Social enterprise credits may be redeemable for a variety of goods and services or may be used to unlock special privileges or perks.

98. **Community involvement credits:** Community involvement credits are a type of non-financial currency that is earned through the participation in community events or activities. Community involvement credits may be redeemable for a variety of goods and services or may be used to unlock special privileges or perks.

99. **Social contribution points**: Social contribution points are a type of non-financial currency that is earned through the completion of social or community service projects. Social contribution points may be redeemable for a variety of goods and services or may be used to unlock special privileges or perks.

100. **Social engagement credits:** Social engagement credits are a type of non-financial currency that is earned through the participation in social or community activities. Social engagement credits may be redeemable for a variety of goods and services or may be used to unlock special privileges or perks.

101. **Social responsibility tokens**: Social responsibility tokens are a type of non-financial currency that is used to reward the adoption of socially-responsible behaviours or the use of socially-responsible products. Social responsibility tokens may be redeemable for a variety of goods and services or may be used to unlock special privileges or perks.

102. **Community involvement tokens:** Community involvement tokens are a type of non-financial currency that is used to reward participation in community events or activities. Community involvement tokens may be redeemable for a variety of goods and services or may be used to unlock special privileges or perks.

Overall, non-financial sociosphere currencies can be a useful way to incentivize the adoption of socially-beneficial behaviours and the use of socially-beneficial products and services, as well as to promote social cohesion and community development.

As is otherwise discussed in this document, there are various requirements that are needed to support different types of value-exchange ecosystems. Part of our challenge is to figure out how to better define; and technically support, how these systems work.

Moral Economy: and 'Ethics' Modelling & Modelling Environments

Each group, by consequence of what it is they do based upon their conjoint agreements; ends-up defining their 'group' sense of 'moral view' which is then in-turn defined as a form of 'ethics' or 'ethical outlook'. Historically, 'ethics' documents are written; but do not necessarily associate very well with the practical realities of what people are actually doing.

Due to cut backs, we are gonna have to fire Dave

The consequence of these systems, as does lead to economics being pushed around from one form of measure to another (ie: safety and/or lack of it = insurance and/or injury costs).

Just as 'Values Credentials' intend to provide the means for people to make declarations and promises to one-another about how they would like to be treated, and in-turn, do unto others; the means to apply these sorts of concepts upon the 'ethical models' employed by group agents; can also be achieved. Yet, it is expected that this will require application interfaces; as, it is unlikely that most people will seek to understand how to read the code itself, to do it.
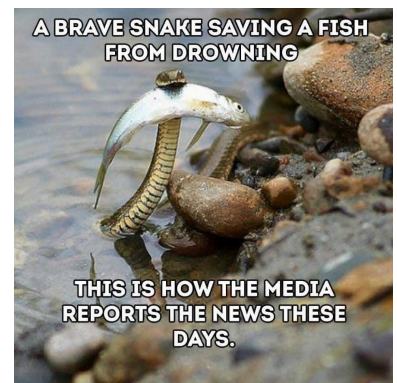
Herein; the purpose of the projects that i am seeking to advance; the purpose is moreover about peace infrastructure projects.

I just want to read some books to your chickens.

As is part of those goals, the means for groups to express their values and then be made able to be 'compliance measured' against those values, helps.

This is considered to be an important constituency for forming 'trust' inferences. In-effect, it is practically appropriate to 'trust' that an animal has certain characteristics based upon what type of animal it is. Whilst the characteristics of legal personalities are often more complex than that of animals, the ability to define tools that support the means for analysis of what actors and agents actually do, as distinct to what they say they do; and then, associate what their expressed statements of intents & purposes are, by comparison to their performances - leads to improved 'trust' supports.

A BRAVE SNAKE SAVING A FISH FROM DROWNING

THIS IS HOW THE MEDIA REPORTS THE NEWS THESE DAYS.

FOR A FAIR SELECTION EVERYBODY HAS TO TAKE THE SAME EXAM... PLEASE CLIMB THAT TREE.

Yet, before that can be defined; the means to figure out how to apply terms for a moral economy - needs to be defined in a way that can be employed online, for proper purpose. This in-turn means that a reference model needs to be developed to consider what rights different agents should have, at different stages of a life cycle of a 'thing' by default.

What are "Peace Infrastructure Projects"

Define Peace Infrastructure.

Peace infrastructure refers to the systems, processes, and institutions that support peace in a society. This can include a variety of different things, such as:

- Legal frameworks and institutions that promote justice and rule of law
- Political systems and processes that encourage dialogue and compromise
- Economic systems that support equitable development and distribution of resources
- Educational systems that teach non-violent conflict resolution and respect for diversity
- Social support systems that provide assistance to vulnerable groups and promote social cohesion
- Media systems that report accurately and fairly on conflicts and promote peaceful dialogue
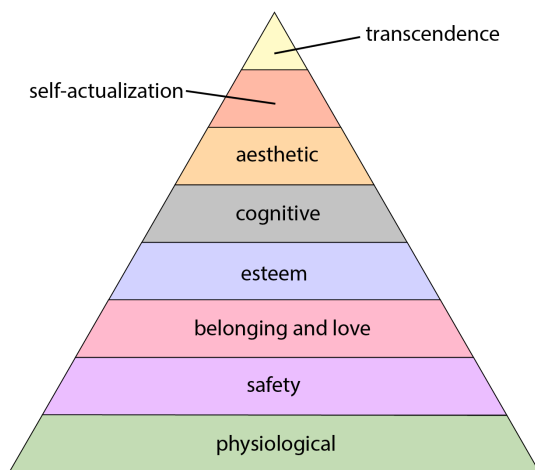
Maslow's hierarchy of needs is an idea in psychology proposed by American psychologist Abraham Maslow in his 1943 paper "A Theory of Human Motivation" in the journal Psychological Review.[1] Maslow subsequently extended the idea to include his observations of humans' innate curiosity. His theories parallel many other theories of human developmental psychology, some of which focus on describing the stages of growth in humans. The theory is a classification system intended to reflect the universal needs of society as its base, then proceeding to more acquired emotions.[3] The hierarchy of needs is split between deficiency needs and growth needs, with two key themes involved within the theory being individualism and the prioritisation of needs.

In many ways, "Peace Infrastructure" refers to the 'infrastructure' needed to support the availability of supports for these sorts of human needs, and our values as described by tools such as the United Nations Legal Instruments.'

As such; whilst Peace Infrastructure traditionally refers to the structures and practices that help to prevent and mitigate conflict, promote reconciliation and cooperation, and create a stable and secure environment for individuals and communities; such as,

- **Human rights protection:** This can include laws and institutions that protect the rights of individuals and groups, as well as advocacy and education efforts to promote awareness and understanding of human rights.

- **Security forces:** These can include law enforcement agencies, military forces, and other security bodies that are responsible for maintaining order and protecting citizens from violence and crime.

- **Mediation and conflict resolution:** This can include processes and institutions that facilitate dialogue and negotiation between parties in conflict, such as mediation centres, peace negotiations, and truth and reconciliation commissions.

- **Civil society organisations:** These can include non-profit organisations, religious groups, and other community-based organisations that work to promote peace and address social issues.

- **Community policing**: This can refer to police programs that focus on building relationships with community members and working with them to address issues of crime and violence.

The broader or applied concept of 'peace infrastructure projects' refers to the means through which people, may via the use of technology; engage in civics activities to improve the circumstances of life of persons; and in-turn also, the environments in which people live. These objectives are commonly associated with pursuits towards achieving the SDGs.

To provide some more specific examples; i have created a number of youtube playlists,

- **Human Consciousness**
  https://www.youtube.com/playlist?list=PLCbmz0VSZ_voTpRK9-o5RksERak4kOL40
- **Science & Spirituality**
  https://www.youtube.com/playlist?list=PLRtuDWE10sVcfZmHqqH2qXPY0I1eHch7j
- **Knowledge Capital**
  https://www.youtube.com/playlist?list=PLCbmz0VSZ_vqrjn5j3Ldedw-NWUFKNhlW
- **Biosphere Management**
  https://www.youtube.com/playlist?list=PLCbmz0VSZ_vovZZfPYe136pRjE6QotzQX
- **SolvingThePlasticsProblem**
  https://www.youtube.com/playlist?list=PLCbmz0VSZ_vrugX0s7t3rdGqyGtkYKDWz
- **Improving Water Quality**
  https://www.youtube.com/playlist?list=PLCbmz0VSZ_vpwHpGRTOKI47pPiWrdDQla
- **Medicinal Earth**
  https://www.youtube.com/playlist?list=PLCbmz0VSZ_vpr1Hok5YfMyAFlKcz0eUxx
  - **Funga**
    https://www.youtube.com/playlist?list=PLCbmz0VSZ_vo4aRHKPha7jGOeB_22hCWL

Whilst there is a lot more resources collected than as is now therefore noted above; the underlying intended purpose for producing Human Centric AI Technology & related works; is to radically improve our capabilities in terms of how it is that we are able to forge and foster the development of 'medicinal earth' related outcomes.

Through the production of 'peace infrastructure' projects; which needs to start with the development of technology, as the means to support the capacities for people to be paid and/or be provided the resources, both from a perspective of the required knowledge, as well as economic support, is not now available.

Yet, the creation of these systems should not act to 'enslave' people, as is therein part of the purpose for determining the term and purpose in relation to the concept of 'peace' infrastructure; as may then be considered distinct to either violence, corruption or war.

Describe Peace Infrastructure Technology...

When asking ChatGPT; it suggests that *Peace infrastructure technology refers to the use of technology to support peacebuilding efforts and promote peaceful societies.*

This can include a variety of different things, such as:

- **Communication technologies:** *These can include tools like social media platforms, messaging apps, and online forums that allow individuals and groups to connect, share information, and coordinate activities.*

- **Data analysis and visualisation tools:** *These can be used to analyse and present data on issues related to peace and conflict, such as patterns of violence, human rights abuses, and economic indicators.*

- **Mapping and geospatial technologies:** *These can be used to create maps and visualisations of conflict-affected areas, helping to identify trends, hotspots, and patterns that may not be immediately apparent.*

- **Monitoring and evaluation tools:** *These can be used to track progress and assess the effectiveness of peacebuilding interventions, such as peace negotiations, reconciliation programs, and economic development projects.*

- **Virtual reality and simulation technologies:** *These can be used to create immersive training and education experiences that teach skills related to conflict resolution, negotiation, and other aspects of peacebuilding.*

Peace Infrastructure Technology can help to facilitate communication, cooperation, and coordination among peacebuilders, and can provide important tools and resources for understanding and addressing conflicts and promoting peaceful societies.

Building strong peace infrastructure is a complex and ongoing process that requires the involvement and cooperation of a wide range of stakeholders, including governments, civil society, and communities.

Whereas, the expanded intended meaning; which is not based upon centralised, global tech platforms, is about producing the tooling to support the human rights of persons in a world that is coupled with the use of ICT & AI. The purposes of these works is prominently directed towards empowering the means for people, in their private, personal & civil capacities to get involved in doing something useful; whilst providing the support needed for those people.

It is important that any agreements that are sought to be employed to defend against alleged wrong-doing; is in-fact, put in place prior to any event leading to a conflict. The practice of engaging in violence, and then defining terms said to exist earlier; is violence.

Moreover; it is not the role of a technology platform to be a court of law or prison system; rather, the means to ensure technology can support these & the many other functions in society, is a human rights matter; that is now poorly supported, without available remedy.

Values Credentials & Anti-Peace Behaviours

Values Credentials are electronic agreements made between one-another and/or between persons and groups; that make promises about how people voluntarily seek to be judged in relation to their own behaviours; and the degree to which, they are then able to be awarded supports on the basis of how people treat one-another; or conversely also, otherwise.

That people, who fail to support the values of which they have claims and/or promised that they seek to uphold; should they breach those expectations, may then be subject to consequences based upon their failure to uphold the values which they agreed to; and that others, are expected to 'in good faith' believe, that those persons, will do so.

Values Credentials are sought to be defined using Human Rights Instruments (here is a draft example) alongside other instruments that are sufficiently well known; although anyone can define a set of values that they seek others to agree to via electronic agreements made with one-another; so long as those values do not break the law, or seek to impugned the human rights of others; which is generally thought likely, unlawful.

It is difficult to identify values that are universally shared by all of humanity, as people from different cultures and backgrounds may hold different values and beliefs.

However, there are some values that are widely considered to be important and are shared by many people across different cultures and societies.

These may include:

1. **Respect for human rights and dignity:** Many people around the world value the inherent worth and dignity of every individual, and believe that every person has certain fundamental rights that must be respected and protected.

2. **Fairness and justice:** Many people value fairness and justice, and believe that everyone should be treated equally and with respect, regardless of their background or circumstances.

3. **Honesty and integrity:** Many people value honesty and integrity, and believe that it is important to be truthful and transparent in one's actions and dealings with others.

4. **Compassion and empathy:** Many people value compassion and empathy, and believe that it is important to show concern and care for others, and to be understanding and supportive of their needs and experiences.

5. **Responsibility and accountability:** Many people value responsibility and accountability, and believe that individuals should be held accountable for their actions and should take responsibility for the consequences of their choices.

How can we define the characteristics of human behaviour or an agent, needed to consider it peaceful as is distinct to wrongdoings, violence, negligence and other moral wrongs?

There are several characteristics that could be considered necessary for an agent (whether human or non-human) to be considered peaceful.

These may include:

- **Refraining from causing harm to others:** A peaceful agent is one that does not engage in activities that cause harm to others, such as physical violence, verbal abuse, or neglect.

- **Respecting the rights and autonomy of others:** A peaceful agent is one that respects the rights and autonomy of others, and does not seek to control or dominate them.

- **Seeking peaceful resolution of conflicts:** A peaceful agent is one that seeks to resolve conflicts through peaceful means, such as negotiation and mediation, rather than resorting to violence or aggression.

- **Showing empathy and compassion towards others:** A peaceful agent is one that is empathetic and compassionate towards others, and seeks to understand and address their needs and concerns.

- **Actively promoting peace and harmony:** A peaceful agent is one that actively promotes peace and harmony, and seeks to create conditions in which individuals and groups can coexist in a peaceful and harmonious manner.

Production Obligations

People are sought to engage on a basis that they will do their best (best efforts) to contribute towards the creation of outcomes that are 'fit for purpose'… This is in-turn a contextually complex concept; that nonetheless, relates, human rights, values, credentials, intents & purposes, derivatives and the means through which fairness is furnished for all.

Where there are disagreements that cannot be resolved; the end-means to determine the outcome of a dispute; peacefully, must always be via support for rule of law, as is part of the human rights statements made in many instruments. What this in-turn means, is that the technological approaches should make every effort to ensure that evidence that is reasonably important for an agent, in association to legal and moral rights; be somehow made available for that person to take to a court of law, should their human rights be in doubt; and/or that, they need some way to peacefully resolve a dispute causing harm(s).

As such; whilst our works should neither engender ourselves or any other, to become judge, jury & jailer; our obligations relating to what it is that we do, may best be considered also in relation to associating what it is we do, with the expectations that we will make best efforts to produce fit-for-purpose outcomes; which is always, dependent upon resources.

Best Efforts

The Concept of seeking to define a framework around Defining of Best Efforts

The concept of "best efforts" typically refers to an obligation or promise to use a reasonable level of care and diligence in achieving a particular result. It is generally understood to mean that a person will make a good faith effort to achieve the desired result, but does not guarantee that the result will be achieved.

"Best efforts" does not require someone to go beyond what is reasonable or to sacrifice their own interests in order to achieve the desired result.

In contrast, behaviour that is intentionally harmful, exploitative, or a willful breach of an agreement of fair dealings would involve a conscious choice to act in a way that is detrimental to others or that goes against the terms of an agreement. This type of behaviour would not be considered to be making a "best effort" to achieve a desired result, as it would be motivated by selfish or malicious intentions rather than a desire to achieve a mutually beneficial outcome.

"best efforts" refers to an obligation or promise to use a reasonable level of care and diligence in achieving a particular result.

This means that a person will make a good faith effort to achieve the desired outcome, but does not guarantee that the result will be achieved.

This means that if something goes wrong or the desired result is not achieved, it is not necessarily a breach of the obligation as long as the person has made a good faith effort to achieve the result.

In contrast, mistakes that are made intentionally are different because they involve a conscious choice to act in a certain way, rather than being an unintentional or unforeseen outcome. Intentional mistakes are typically made with the knowledge that they are likely to result in a negative outcome, and may be motivated by selfish or malicious intentions.

These mistakes would not be considered to be made in good faith or as a "best effort" to achieve a desired result, as the person making the mistake is acting in a way that is not in line with the goal or purpose of the activity.

Fit for Purpose

The term "fit for purpose" refers to the extent to which a product, service, or system is suitable or appropriate for the specific purpose or use for which it was designed.

When designing tools as part of an ecosystem solution that is implemented using software and socio-economic systems, it is important to ensure that each component is "fit for purpose" in order to maximise the effectiveness and efficiency of the overall solution.

To ensure that a component is "fit for purpose," it is necessary to consider a number of different factors.

These might include the specific requirements or needs of the users or stakeholders who will be interacting with the component, the technical capabilities and limitations of the component, and any regulatory or compliance requirements that must be met.

Overall, a component is considered "fit for purpose" if it meets the specific needs and requirements of the users or stakeholders, and if it performs the functions it was designed to perform in an effective and efficient manner.

What sorts of considerations should be made to evaluate whether or not a solution meets the specific needs of a particular use case?

There are several considerations that should be made when evaluating whether or not a solution meets the specific needs of a particular use case.

Some of the key considerations might include:

1. **The specific requirements or needs of the users or stakeholders**: It is important to carefully consider the specific needs and requirements of the users or stakeholders who will be interacting with the solution.

   This might include factors such as the tasks they will be performing, the information they need to access, and any specific constraints or limitations they may face.

2. **The technical capabilities and limitations of the solution**: It is also important to consider the technical capabilities and limitations of the solution, and to ensure that it is capable of performing the tasks it was designed to perform.

   This might include factors such as the performance, scalability, and reliability of the solution.

3. **Any regulatory or compliance requirements**: Depending on the context in which the solution will be used, there may be certain regulatory or compliance requirements that must be met. It is important to carefully consider these requirements and to ensure that the solution is compliant.

4. **The cost and value of the solution**: It is also important to consider the cost of the solution and to ensure that it provides good value for money.

   This might involve comparing the cost of the solution to the benefits it is expected to provide, and determining whether the benefits outweigh the costs.

Overall, these are just a few of the key considerations that should be made when evaluating whether or not a solution meets the specific needs of a particular use case.

Agent Labelling

It is important that there is a clear means to distinguish between the content, information or processes and decisions that are made by Software Agents (AI) Vs. those made by legal entities; and in-turn also, the ability to determine which specific human beings were involved in many or causing any sort of causality related action to occur.

NOTE: THE BELOW CONTENT WAS PREVIOUSLY GENERATED VIA CHAT with CHAT-GPT[3]

I HAVE NOT YET MODIFIED THE CONTENT IN RELATION TO THIS POINT. NONETHELESS; THE ECONOMIC STRUCTURES TAKE INTO CONSIDERATION WHAT PEOPLE DO, THEREIN, THE METHODS THEREBY PROVIDE A MEANS TO ILLUSTRATE WHEN AI AGENTS ARE USED.

There are several dangers and threats that may occur if individuals are falsely led to believe that they are consuming information generated by other human beings or legal entities when it is actually generated by an artificial intelligence (AI) program. Some of these include:

- **Misinformation and disinformation:** AI-generated content can be used to spread false or misleading information, which can have negative effects on individuals and society at large.

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[3] https://devdocs.webizen.org/SocialFactors/WebScience/SafetyProtocols/AgentLabelling/

- **Manipulation and influence:** AI-generated content can be used to manipulate individuals and groups by appealing to their emotions, biases, and prejudices.

- **Privacy and security concerns:** AI-generated content can be used to target individuals with personalised phishing, scams, and other malicious attacks.

- **Dehumanisation and mistrust:** People being exposed to AI generated content that is falsely presented as being generated by human could lead to mistrust in human-generated content, leading towards a dehumanisation of human expression as well as a mistrust in human-generated content, AI-generated content can be used to perpetuate stereotypes and reinforce societal biases.

- **Interfere with legal process:** AI-generated content can be used to impersonate people or entities for fraudulent activities or illegal activities and could interfere with legal proceedings.

Overall, it is important for individuals to be able to distinguish between AI-generated content and human-generated content in order to make informed decisions and to protect themselves from potential dangers.

Another potential danger of falsely believing that information is generated by human beings when it is actually generated by AI is that it may lead to a lack of critical thinking and evaluation of the information being consumed. If people believe that the information they are consuming is coming from a trusted source, they may be less likely to fact-check or critically evaluate it. This can lead to the spread of misinformation and disinformation, as well as a decrease in people's ability to make well-informed decisions.

Additionally, there may be ethical concerns associated with the use of AI-generated content, particularly when it is used to impersonate human beings or legal entities. The ability to generate content that is indistinguishable from human-generated content raises questions about consent and accountability, as well as potential harms that may be caused by the use of this technology.

Finally, the widespread use of AI-generated content has the potential to disrupt various industries and change the way people think about and interact with information. It could change how professional authors, journalists, and creative professionals work, which could have both positive and negative impacts on the economy and society.

If government departments or employees use Artificial Intelligence (AI) in a way that has human rights implications and it is not clearly labelled as having been done by an AI agent, there could be several threats. Some of these include:

- **Discrimination and bias:** If an AI system is not transparent in its decision-making processes, it may perpetuate discrimination and bias against certain individuals or groups, potentially violating their human rights.

- Lack of accountability: If an AI system is used to make decisions or take actions that have human rights implications, it can be difficult to hold individuals or organisations accountable if the system is not clearly labelled as an AI agent and its decision-making process is opaque.

- **Due process concerns:** If an AI system is used to make decisions that affect an individual's rights or freedoms, it may not always provide the same level of due process

protections as a human decision-maker. This could lead to violations of human rights and the rule of law.

- **Privacy and security:** If an AI system is used to process personal data without proper regulation or oversight, it could lead to privacy violations, security breaches, and other harms.

- **Lack of transparency:** If the actions of an AI agent is not clearly labelled, it can make it difficult for people to understand how decisions are being made, which could lead to mistrust and lack of transparency.

- Interference with human autonomy: If an AI agent makes decisions that have significant impact on human life, people may lose their autonomy in the decision making process and their right to self-determination.

Overall, it is crucial that government departments and employees are transparent in their use of AI, clearly label any decisions or actions that are made by an AI agent, and ensure that the AI systems they use are fair, accountable, and respect human rights.

Another potential threat is that the AI may have unintended consequences on human rights, if it is not properly implemented, tested, and monitored. Even if the AI system is not inherently biassed, the data it is trained on may be biassed, leading to unjust outcomes.

Additionally, if the use of AI is not transparent and the decision-making processes of the AI system are not explainable, it may be difficult for people to understand how the decisions are being made and to challenge them if they believe that their human rights are being violated.

Moreover, if AI agents are used in law enforcement or security, without proper oversight or regulation, there could be a risk that the AI systems may be used to infringe on individuals' rights, such as freedom of speech and freedom of assembly, or to target certain groups based on their ethnicity, religion, or political beliefs.

It is important that the use of AI by government departments and employees is subject to proper regulation and oversight, so that human rights are protected and that the actions of the AI systems can be transparently tracked and audited.

Finally, It is crucial that the AI systems are continuously monitored and evaluated for their impacts on human rights and adjustments or replacements are made if necessary.

There are several potential risks in circumstances related to foreign governments using AI:

- **Cyber espionage:** Foreign governments may use AI to conduct cyber espionage or cyberattacks against other countries, potentially stealing sensitive information or disrupting critical infrastructure.

- **Misinformation and disinformation:** Foreign governments may use AI-generated content to spread false or misleading information, with the intention of manipulating public opinion or undermining the credibility of other governments.

- **Interference in domestic politics:** Foreign governments may use AI to interfere in the domestic politics of other countries, with the goal of swaying elections or influencing policy decisions.

- **Economic espionage:** Foreign governments may use AI to gain an unfair advantage in international trade, by collecting business intelligence and targeting specific industries or companies.

- **Military advantage:** Foreign governments may use AI to enhance their military capabilities, potentially threatening the stability of regions and global security

- **Human Rights abuse:** AI technology has been used by some governments to track and control their citizens, violating their privacy and freedom. This technology can also be used to identify and monitor individuals based on their ethnicity, religion, or political beliefs, leading to further human rights violations.

Overall, the use of AI by foreign governments has the potential to destabilise international relations and threaten the security and sovereignty of other countries. It is important for governments to be aware of these risks and to take steps to protect against them, through international cooperation, regulation, and diplomacy.

Another potential risk is that foreign governments may use AI in a way that violates international law or human rights. For example, they may use AI-enabled surveillance to target political opponents, or use autonomous weapons to target civilians in warfare. These actions can have significant negative consequences on human rights and global security.

Moreover, the increasing use of AI in economic and technological fields may lead to a power imbalance between countries that have access to advanced AI technology and those that do not, leading to further economic and societal inequality.

Furthermore, if AI is not controlled and regulated properly, foreign governments may use it to violate international norms, such as economic sanctions or arms control agreements.

Lastly, foreign governments may also use AI to target individuals, companies or countries with cyber-attacks and disinformation campaigns for political, economic, or military gain.

To mitigate these risks, it is crucial for countries to work together through international organisations and agreements to establish norms and regulations for the responsible development and use of AI, as well as to cooperate on matters of cyber security, disinformation, and human rights.

There are several ways that AI content and/or software actions can be clearly labelled and associated with the legal entity responsible for them, including both the legal personality (e.g. government department, institution, corporation or business) and the specific natural legal entities/individuals who were involved in enabling or using the AI for the particular artefact or event. Some of these methods include:

- **Digital Signatures:** Using digital signatures to verify the authenticity of AI content or software actions, and to link them to the legal entity or individual responsible for them.

- **Attribution Statements:** Including an attribution statement in the AI content or software that identifies the legal entity or individual responsible for it.

- **Watermarking:** Watermarking AI content or software with unique identifiers that can be used to trace it back to the legal entity or individual responsible for it.

- **Logging:** Keeping detailed logs of who had access to and used the AI system, and what actions they took.

- **Transparency Reports:** Publishing transparency reports that provide information on the legal entities and individuals involved in the development and use of AI, as well as the system's decision-making processes and any human rights considerations.

- **Certifications:** Certifying the AI system by a third-party, that verifies that the system meets certain standards, such as fairness and transparency

- **Source codes or system architecture:** Making the source codes or system architecture of AI systems available for public inspection, in order for third parties to verify how the systems make decisions.

- **Human oversight:** Ensuring that AI systems are designed with human oversight and decision-making capabilities to make adjustments or corrections if necessary, and keeping records of those adjustments or corrections.

Overall, it is important to ensure that the AI system is clearly labelled and that the legal entity or individual responsible for the system is easily identifiable and can be held accountable for its actions. This can be achieved through a combination of technical and organisational measures, such as the ones listed above, which should be chosen according to the specific context and the potential impacts of the system.

Another way of clearly labelling AI content and/or software actions and associating them with the legal entity responsible for them, is by using blockchain technology, it can enable the creation of an immutable and transparent record of the origin and usage of the AI content or software. This can enable users to verify the authenticity of the content and trace it back to the legal entity or individual that created it, providing a tamper-proof record of the development and usage of the AI system.

Another approach to clearly identify the responsible entity is by using standard data labels, like the "metadata" of digital files, AI artefacts should also have standard labels that clearly identify the legal entity or individual responsible for them, such as the developer, creator, owner, or operator.

Additionally, governments could also play a role in promoting transparency and accountability of AI systems by implementing regulations and guidelines on the labelling of AI content and software actions, and enforcing penalties for non-compliance.

Finally, it is important to note that it is not just a technical problem but also a societal one, and that it requires a multi-stakeholder approach, which includes industry, civil society, and government, to develop a solution and to ensure that it is effectively implemented.

Another way of clearly labelling AI content and/or software actions is by using certification systems. These systems involve an independent third party, such as a regulatory agency or industry group, evaluating the AI system and verifying that it meets certain standards, such as transparency, fairness, and accountability. These certifications can be used to clearly label the AI system and to provide assurance to users that the system has been independently reviewed and found to be trustworthy.

Another way of clearly labelling AI content and/or software actions is by using explainable AI (XAI) techniques, these techniques allow the AI system to explain its decision-making process to users in a way that is easy for humans to understand. This can help users to trust the system

and to understand how it makes decisions, and also make it easier for legal entities or individuals to be held accountable for the actions of the system.

Finally, it is important to educate the public about the importance of clearly labeling AI content and/or software actions and associating them with the legal entity responsible for them. This can help to increase awareness of the risks associated with AI and to promote responsible use of the technology.

In summary, there are many methods for clearly labelling AI content and/or software actions and associating them with the legal entity responsible for them, such as digital signatures, attribution statements, watermarking, logging, transparency reports, certifications, blockchain, standard data labels, explainable AI (XAI) and education. These methods can be used in combination to provide a comprehensive approach to transparency and accountability of AI systems.

An ontology using RDF and common vocabularies can provide a structured way to describe and represent information related to the legal entity responsible for AI content and/or software actions, as well as the actions themselves. RDF (Resource Description Framework) is a standard for modelling information on the web, and it provides a way to express the relationships between resources (e.g. documents, people, and concepts) using a graph-based structure.

A simple example of an RDF OWL (Web Ontology Language) ontology for describing AI content and software actions could include classes such as "AI system", "Legal entity", "Individual", "Action", and "Responsibility". Each class would have a set of properties that describe their characteristics and relationships, such as "name", "developer", "owner", "operator", "decision-making process" and "Standards met", respectively.

For example, the class "AI system" could have properties such as "name", "developer", "owner", "operator" and "decision-making process". The class "Legal entity" would have properties such as "name", "type" (e.g. government department, institution, corporation or business), "location", and "jurisdiction". The class "Individual" would have properties such as "name" and "role" (e.g. developer, owner, operator). The class "Action" would have properties such as "name", "date", "type" (e.g. decision, action) and "outcome". The class "Responsibility" would have properties such as "level" (e.g. primary, secondary, etc) and "entity" (e.g. legal entity, individual)

These classes and properties can be interconnected to describe complex relationships between AI systems, legal entities, individuals, and actions, and can be used to trace the origin and usage of AI content and software actions, and to establish accountability and transparency. The use of common vocabularies, such as schema.org and others, would help to standardise the representation of the information and make it more easily understandable and usable by different systems and applications.

It's worth noting that this is just a simple example and that a more comprehensive ontology would be more complex and take into account the specific context and use case. And that, the use of RDF and OWL enables the use of formal reasoning to infer new information from the ontology, which is particularly useful for the transparency and accountability of AI systems.

Additionally, using RDF and OWL to represent an ontology can enable the use of formal reasoning to infer new information from the ontology, this is particularly useful for transparency and accountability of AI systems. For example, by creating inferences rules in the

ontology, you can automatically infer information about the legal entities, individuals and actions responsible for an AI system, based on the properties of the AI system.

Moreover, using RDF and OWL in this context can also enable the integration of the ontology with other systems, such as databases, document management systems and even other AI systems. This is particularly useful for creating transparency and accountability solutions, where information about AI systems, legal entities and individuals need to be shared and combined across different systems.

Another advantage of using RDF and OWL is that they can leverage the Linked Data ecosystem, which allows for easy data sharing and integration across different organisations and domains. This allows for more collaboration between different stakeholders, like industry, civil society and government, to help ensure the transparency and accountability of AI systems.

Finally, it is important to note that creating an ontology is just a first step, the ontology itself should be continuously updated, maintained, and evaluated to make sure it is still useful and useful, to address the complexity and dynamic nature of the field of AI.

The Final Document Section: In Conclusion

This document is an unfinished initial draft; which now therefore, requires a lot more work, but at least some of the older texts have now been dumped into this document, that has in-turn led to more writing and hopefully something that provides something more useful, than nothing.

Presently; the primary purpose, is in seeking to evolve the works required to support the "Human Centric AI" Work efforts; which will thereby require, a lot of people contributing.

If people, summed up how much time and effort has gone into 'world of warcraft', that volume of effort, spent recreationally and otherwise; is not unlike the scope of works that are required to achieve some of the goals these works are squarely intended to address; which, if required, is thought possible simply on the basis that if we build the systems using eCash and that these systems are indeed successful; then the value of eCash will go up, and everyone gets paid.

But, this still means that we need to figure out how to define and design the use of 'units'; and related business systems...

The purpose of this document is to outline the technical considerations relating to the production of informatics systems, that are more specifically focused upon bio-abundance of nutrients required by human hosts for improved and/or best function.

Fundamentally the outcome is intended to create some sort of decentralised platform model that can be used for managing health using knowledge about non-pharmaceutical approaches; thereby seeking to employ the western medicine system where required for diagnostic purposes save exceptional and/or emergency circumstances.

End Goals: its about Health, Mental Wealth, Human Rights & Dignity.

In-order to create tooling to employ knowledge to support a 'medicinal earth' outcomes; we need to,

1. To produce an informatics environment that is safe enough to populate with a comprehensive volume of health informatics data; solely for Private & Personal use.

2. For the informatics system to operate on an average personal computer or laptop; and, support connectivity with other mobile devices (watches, smart-phones, etc.) whereby apps may in-turn be used to perform functions, cooperatively overall.

3. To formulate metrics that track general wellbeing, improvements, declines, etc.

4. To figure out what factors need to be put into the modelling; and,

5. To figure out how the modelling may take into account different hypotheses, etc.

6. To create evaluation models based upon the underlying science; which may then be associatively considered in relation to the ingredients found in different products.

7. To figure out a morally appropriate business model that best promotes human rights; in relation to the context of using technology to best support human health.

8. Figure out how to fund the work of so many; in many different complex fields; as to provide that knowledge in a useful format; that can then be made-use of by people.

These complex requirements; are not something thought of easily done initially; but is in-turn the sort of outcome that we need to rapidly & intentionally design technology to achieve.

Defining tools to produce economic support for a 'Medicinal Earth' Knowledge Economy

The vast majority of medicinal products, relates to practices whereby specific constituencies are refined from natural world sources; and then studied. The underlying implication is that; with the use of technology, these underlying constituencies can be identified and structurally supported to be considered in relation to food, herbs & similar.

Presently, there is no known 'app' or solution where people (human beings) can provide via either simple or complex tools (ie: forms vs. AI systems); health & well-being related information, including inputs of conditions that are thought to be relevant by the host; and that the underlying organic chemistry and biological sciences processes are performed, as to result in recommendations about foods, herbs, teas and other non-pharmaceutical prescription based agents; that could improve the function of the host, whilst also providing protections against cumulative amounts of specific agents, that may otherwise occur if those insights were not available to the person.

Whilst it is believed that a great deal of the underlying science does in-fact exist; the means to transform the knowledge into a format that delivers tools as easy to use as uber-eats or social media platforms; is not known to currently exist.

These structures then seemingly require different 'levels' as to support the differences between agents that are thought unlikely to cause harm (ie: Ascorbic Acid / Vitamin C) vs. those that can become toxic / cytotoxic, should an excessive amount be consumed.

Similar but differently; there are various 'agents' that can assist with the removal of toxins.

Traditional medicinal systems of the world; include but are not limited to,

- Traditional Chinese medicine[4]
- Traditional Indian Medicine: Ayurveda[5]
- Traditional African medicine[6]
- Traditional Persian Medicine: Mizaj[7]
- Traditional Indonesian Medicine: Jamu[8]

Every culture has medicinal traditions, including many indigenous cultures around the world. Indeed, medicinal behaviours are not simply associated only to human beings.

Whilst every human being is engaged in some form of natural medicine or healthcare activity on a daily basis; the relationship between knowledge and practices is quite varied and in some regions less supported than others; due to various factors, including economic incentives and related structures.

There is an enormous amount of knowledge that exists; it's just not been given the priority that could have led to these sorts of solutions becoming available earlier; and these sorts of problems have a meaningful relationship with the business systems of learning centres.

It is not without consideration, that some places have engendered environments around communities that contain many different forms of toxins and agents that act to harm life, including but not exclusive to human life, which is often the focus when spoken about in news reports. The alternative ideology or consideration that is being slowly developed herein, is the idea of forming the environment around people to be a healthy environment.

There's many, many examples of how this general 'straightforward' idea is both old, and commonly considered by some cohorts in particular, whose knowledge is a form of wealth.

Traditional 'western' medicine approaches provide particular labels and associates with particular tools; that pre-date the development of AI & Internet, although therefore developed; yet, not necessarily by persons whose skill set has anything to do with ICT & AI.

The "universal language" that may in-turn be developed and/or forged, computationally, may lead to entirely different qualifications and/or labels being placed upon biological problems. This is in-turn also considered to be a requirement due to various forms of manipulations and definitive differences that do not have a practical relationship with reality, but rather have been developed as a manifest symptom of others broader problems; whether they be environmental, social (inc. political) or otherwise.

Whilst people are more complicated than tomatoes and/or goats; the underlying realities of biological relationships associated with the concept of the historical meaning of 'health', exists, irrespective of any anti-health influences that may seek commodification revenues.

It is also noted that implicitly within these works is a process of performing dynamic engagement with people about their health, mental wealth and general wellbeing.

As is the case with many, there are many people i've known in life who appear to either have been misdiagnosed and that some underlying factors and/or cause is blatantly obvious outside

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[4] https://en.wikipedia.org/wiki/Traditional_Chinese_medicine
[5] https://en.wikipedia.org/wiki/Ayurveda
[6] https://en.wikipedia.org/wiki/Traditional_African_medicine
[7] https://en.wikipedia.org/wiki/Iranian_traditional_medicine
[8] https://en.wikipedia.org/wiki/Jamu

of the 'clinical' setting; or that there is some form of health issue that is otherwise not seemingly being addressed in any useful way, as would promote the wellbeing interests of that person.

As a consequence of producing health related informatics and then enabling people to experiment with different types of herbs, foods, lifestyle practices and choices; the means to get a better understanding of various kinds of issues that do in-fact require specialised expert treatment by an appropriately qualified professional, may in-fact be enhanced.

Similarly and/or conversely also; the means to keep track of health care related factors from a personal perspective; both improves health, but also leads to accountability support in instances where wrong-doings have occurred of some kind, causing injury.

In recent years, I have suffered serious changes to my eye-sight, said to be due to old-age; leading to additional costs and enormous concern about the ramifications, only for the issue to have significantly healed over time. So not old age, but a problem with fee generating reprobates who seek to be careless about the lives of others.

There are many, many issues and serious implications & consequences that have led me to a position where 'kindness' for these very dangerous people, is no longer good enough. These people have sought to employ the protection of the health system to engender harms upon others; and that's not ok. In this case, they made choices in relation to their dealings with a man, who whilst poor, defined technology now being rolled out around the world via WHO to support health, deliver SDGs and promote wellness. Irrespective of how important they think they are, or how protected; the implication of demanding payment for acts that harm others, defines them. Whereas if these knowledge economic systems are in place, we'll know who are the vampires or similar; the blood sucking, brain eating zombies; and who, indeed, are doctors.

Wikipedia defines the term 'doctor' in the following way. "A physician, medical practitioner, medical doctor, or simply doctor, is a health professional who practises medicine, which is concerned with promoting, maintaining or restoring health through the study, diagnosis, prognosis and treatment of disease, injury, and other physical and mental impairments."

Presently, it's unclear how many people actually have access to the services of a real doctor, and that the systems required to evaluate what these people actually are; has not yet been built.

Humanity at a Crossroads

Technically; due to the underlying works of many, the beginnings are fairly close to being able to be deployed; and in many ways, it's deployable today. But the 'social' issues associated with corruption still have an overwhelming influence, often alienating progress & improving support for Human Rights, Law, Democracy.   It is expected that we should be looking for some sort of insurance framework to consider what happens to any dependents should the survival of people helping to create this, not end-up well. I have enough examples of people doing good work, who have died. Their children, left with not very much information; sometimes, its said simply, they committed suicide. But that's not really fair. Not really. There are many different needs for 'fair work' terms; and I think it's time to start working through those requirements.