ABSTRACT:

Achieving the solution direction objective of the 2017 Global Challenges Foundation Competition, it is important to understand population growth has driven transitions throughout human history, so to solve evolving issues. By understanding the major transitions, a clear understanding of where we are heading, what our next major transition is, and recognizing we are currently at the next transition threshold.

To recognize when major transitions happened, consider a population of 10 people, what their daily focus and knowledge would be. Designing and building cars or survival? Their focus will be on survival, 24/7, so much so, the process is subconscious. As the population grows, teamwork applied for benefits shared in time away from survival focus, where eventually the diversity of society becomes much too complex to solve problems while at the sub-conscious state (Tower of Babel). [1] Higher level abstractions are then created (initiating consciousness) to aid solving problems. Eventually, higher level abstractions misuse is discovered enabling deception for personal unearned gain. Today deception is widespread. i.e. the 1990's "Trillion Dollar Bet" [2] of a wrongful manipulation of world stock markets draining southeast Asia and causing a wave of economic fails around the world, deceptions to cover it up and war distraction. This breakdown, caused by misuse of our abstractions, presents us at this current threshold of transition.

Global Governance is about directing the use of human resources, natural resources, knowledge and our extension of these. The needed organized human structures are in place, however, what is missing is proper direction and feedback loops for verification of course taken to enable needed changes and corrections which arise as we move forward. Even a guided missile needs a feedback loop to stay on course.

Before proceeding with this entry, there is an unavoidable matter to be brought forward, recognized.

Denial is the most powerful influential tool of humankind. When and how used, is a choice. To deny choice in general, is counter to reaching the goal of this competition, for solutions are in providing the individuals of the population means of voicing their individual choices regarding the addressing of genuine global issues. However, given the various governing and economic structures existing today in the world, participating in the solution direction can be denied of the individuals by their respective governing and economic systems. The ultimate response of such denial is of course conflict, war. Additionally and unfortunately, there are promoters and many followers of such belief systems who believe in one final world war before the world unites, and many of these are not open to alternatives. These parties are representative of what needs not to be fought but overcome. The solution direction presented here achieves this when enough done in using the solution direction presented to produce obvious and clear benefits shared, so to encourage participation by those who otherwise resist.

The United Nations is the global level organized structure, and its "Universal Declaration of Human Rights" [3] is the global foundation document upon which the solution direction presented here is to function. The solution direction is downward scale-able for application at the various levels of nations, states, local communities, and so forth. The United Nations with all its existing resources and representatives of nations around the world, can collect up and present their concerns to the people of the population, regarding global issues in need of being addressed.
The Global Challenges “A New Shape” competition criteria on the "Abstract" portion of an entry reads: "The abstract must summarize the design of the model, including the institutions, regulations, decision-making paths and control mechanisms it involves, as well as how key individuals and other decision-making bodies are to be appointed."

The "Abstract" criteria may be putting the cart before the horse regarding what modifications, if any (re Appeal for a Parliamentary Assembly), may be required of the human structure of the United Nations in its implementation portion of the solution direction of Global Governance. Also, trying to solve new situations, issues, problems with old methods of decisions by small collectives, which have not achieved resolution of these matters involving the people of the population, leads to a needed transition in how to make decisions. Such a change may have more adjustments required for efficiency, yet to be realized.

The simplicity of the solution direction given here, providing a viable and efficient means of giving the population individuals a voice in directing their Global Governance, in addressing global issues, may prove an inherent ability not only to meet the Assessment Criteria but to surpass it.

The fundamental elements of the solution direction are:

A) Report on the current global state and issues.

B) Report on achievements accomplished regarding global issues.

C) Requests for funding on various global issues, along with current or potential solution directions, and what is required to do, for each.

D) Most important, providing a means of equal voice for the individual people of the population in what directions to focus on doing.

In essence, elements of a feedback loop, done once a year or as is reasonable per the specific task. Annual reports and funding requests presented to the people for their review and direction, given within a reasonable timeline.

Do we, as a population, have enough human resources, natural resources, knowledge and our extension of these to move forward in addressing global issues? Answer: We have more than needed when converting current resources used in damaging the environment and going against the "Universal Declaration of Human Rights" to make these resources available for addressing global issues [4]. So it is a matter of how to convert, and this accomplished by starting with what resources exist for addressing global issues and using them by direction of the population's choices. This solution direction enables and instills selection of "productive, inclusive teamwork" rather than "destructive, division conflict." A very substantial change in population attitude enabled by giving voice to the individuals of the population.

DESCRIPTION OF THE MODEL:

A) In consideration of the following, the U.S. Government work order is first:
   - History of United States portion of funding the United Nations and recent changes to that amount.
   - The work order for the United States government, being the basis of the solution direction.
   - How this U.S. work-order can influence the funding portion size provided to the U.N. by the U.S.
   - As an example of a scaled down work order having a direct connection to the people's direction of funds use. The use of their taxes, though not all countries have compatible taxes to this work order. [5]

B) Establishing a common measure tool set to enable equal voice.
   Due economic differences around the world, a means of providing the people, as individuals, an equal voice in directing the focus of addressing global issues, is needed.
C) A United Nations Global Governance work order, using the "common measure tools."

D) Closing out this Model Description section with our knowledge and Artificial Intelligence (A.I.) extension used in a manner not to guide us but present us options in using human and natural resources, and our extension of these. Establishing “Safety Use” of the A.I. extension of our knowledge is important.

---- (A) ---- United States Government work-order  ---------------------------------------------------------------

[address to; a state representative or tax collector/processor]

A WORK ORDER for Government:

The Peoples Rights and Duty:

“The people” as individuals, need to know how, and be enabled, to take responsibility for their share of funding their business of government. The United States founders recognized the people's right and DUTY to put off government not working in the peoples best interest. Re: Declaration of Independence [6]. The founders did not specify how failing government is to be put off, but history leading up to founding this country includes taking funding away (re; Boston tea party.)

The Work Order:

Accomplish three tasks to provide financial direction voice of the employers, the people, to their Government Business employees.

1) Tax collecting agencies.

Local, State, Federal, are to provide their employers, the taxpayers, with a voice in how their funding of government is to be used, via allocation forms. If they do not have the forms, they are to produce the forms in short order. Not years from now promises, but right now. Considered these instructions of a high priority work order. Note: The Tax processors are to allocate funding as per each taxpayer's instructions and to provide allocation verification receipts. The People set the budget.

2) Government business.

Representatives typically also assigned to federal level committees, are to provide transparency assurance information to the people. In other words: The information of what Government wants funds for that each employer of government (taxpayer) may decide how their funding share, shall be used. Understanding that if the people do not know what their government employees want funds for, the employees do not get funding for it. "Simple and Clear," as shall the government transparency information be framed in its presentation. Spending history being relevant shall be included. Internet access to such information also to be straightforward and clear with general overview but allow employers of government the ability to look deeper into the details [7] and allocate their portion of funding at what effective level they so chose. Simply put: Representatives are to produce Annual Reports and Funding Requests, to the People.

Note: There is an option for individuals filling out the funding allocation forms (to be returned with individual tax returns) to choose what portion of their business of government funding, the government business may decide how to be used (buffer funding). The buffer funding, influenced by the people participating in the voting processes relevant to such buffer funding, in how used. Voting is of course also used regarding who to hire to integrate, optimize and implement the funding directions of the government's employers, the people. The representatives need to know what their job is to do in representing the people via the setting of budgets by their employers, the people as individuals.
3) Communicated and understood.

“Funding Constraints” have to be compatible with the founder’s documents and work within the nature and purpose of the people's business of government.

Supportive Note:

In this Republic the Founders established, there is not mention of Democracy in any of the founder's documents. Voting, a tool often perceived as one of democracy, however, either the individual take responsibility for their share of funding their business of government or others will. However, not allowing individuals a voice where it bottom line counts is neither an act of a republic nor a democracy. Clearly in violation of the Founder's Spirit and Intent.

In Summary:

Fund Allocation paperwork is required, providing the employers, the people, bottom line financial voice of their government business direction.

Regards, an Employer of Government,

[sign]

(optional contact information. i.e. email, mail, phone)

--- (B) ---- Establishing a common measure tool set to enable equal voice -----------------------------

Crypto-measures and Crypto-votes:

Providing the individual people of the population a means of equal measure for use in global teamwork direction.

Understanding many people do not have internet access to participate directly. For these individuals, alternatives may be utilized (i.e. allocation forms) and then transferred into crypto-measures, crypto-votes and done by qualified and unbiased workers. Of course, access to the internet for this process, by all individuals, is a goal.

In the full picture of the solution direction, there is a period of initializing and normalizing the feedback loop for and of the people. With this in mind, it is not critical to have the whole population participating initially but to ramp up so to avoid or limit expected brief downturn during initialization and normalizing of the feedback loops. Going through the feedback loop cycle a few times to establish feedback loop corrections to the initialization (first cycle) of a loop, for naturally normalizing the intended feedback loop process. Individuals may need to acclimate to this process of having their voice summed to improve their choices in their use of these crypto-tools and to recognize and adjust to nullify any promotional media excessive biasing of relevant issues.

Considering computing technology continues to advance, “What We Make, We Can Out Date And Break” and acknowledging the brute force computing power of spy organizations such as the NSA, CIA, etc. and external brute force computing power contractible by such spy organizations, it is reasonable to have concern over the potential of wrongful manipulation of crypto technology in use by the public to alter, to bias, to distort the outcome intended by the people in sum. To address this concern, any such manipulation found shall result in exposure to the full public the identities of the individuals involved, equipment and
other resources used including finances (x2) to fund such manipulations.

Resources used in such deceptive manipulations converted to supporting the genuine voice of the peoples directions, i.e. expansion of the inclusion of more individuals in noted crypto-tools use. The measure of those involved permanently forfeited to the crypto-measure “unused pool” and their voting status permanently denied. Resources not beneficial to convert in anyway, destroyed. No Exceptions! Creating motive not to do and potential motive to expose where done. Enforceable by public awareness and direction of individuals’ share of funding, the individuals’ measure allocation to resources needed for such enforcement. Expansion in response to suppression.

Specifications:

Using technology similar to that of cryptocurrency [8], but different in that value does not change, unlike currency. Another difference is “transactions” are between the individual and the target goal of the global tasks to address. Annual refill of one (1) crypto-measure is automatic. Crypto-votes only need verification of not using more than one per vote topic or sub-topic, per voting event, per individual. Validation processing power needed for crypto-measures and crypto-votes use by participating organizations and individuals’ option to contribute where technically reasonable. These differences to make the system much easier and less costly to create and maintain than of cryptocurrency while achieving the intended functionality.

Open source, distributed or decentralized system of Crypto-measures and Crypto-votes. Enable system on a global scale.

Crypto-measure is one (1) per person, per year, does not carry over. Measure able to be fractionalized allowing the individual to spread their measure across different topics of address.

Crypto-votes are as many as a person uses but limited to only one per voting topic or subtopic per voting event.

Verifiable & printable receipts for the individual on their use of these crypto-tools is part of the system.

Verification that no one has more than one account and is alive.

Anonymity assured in use of crypto-measure & crypt-votes. i.e. use of Tor [9]

All running and final totals of applied crypto-measures and crypto-votes and to what global tasks they are applied to are made publicly available. [With reasonable technical processing lag time individual's can improve upon via their processing power contribution.]

Notes:

To understand the use of these crypto-tools is to understand they do not represent monetary value directly, but rather when summed under the various global tasks, chosen by the people to focus on doing, represent what percentage of the total available funding is for each of these chosen global tasks.

Crypto-votes used for prioritizing what issues to present for applying crypto-measures to and for determining which chosen global tasks to apply the remaining (unused pool) crypto-measures to.

In simple terms: 100% of crypto-measures existing = 100% of available funding.

Crypto-tools development and Decentralized or Distributed network participation, including maintenance, is to be established by putting out a public call to Open Source Software developers, potential network participants and others, such as language translators of the interface so also to enable association of these crypto tool's use, to the presented global tasks.

The cost of such development and maintenance is to be determined but probably cost less than many
might imagine. In breaking costs down into separate tasks, it is reasonable to project account creation, verification of the unique individuals as the more expensive facet of the system and can extend to those who do not have available local internet access and require human resources to assist. Again, providing local internet access to remote locations for this process is a reasonable goal, though initially not a priority.

--- (C) --- United Nations work-order

[addressed to; United Nation members of General Assembly]

A WORK ORDER for Global Governance, by the people of the world population:

The Peoples Rights and Duty to honor on the global level: UN "Universal Declaration of Human Rights."

“The people” as individuals, need to know how, and be enabled, to take responsibility for their measure share of directing their Global Governance business.

*The Work Order:*

1. Enable the Voice of the People.

To have produced, maintained, translated and put into use the enabling technology for individuals of the population, access to and usage of the crypto-tools mentioned above. Alternatively, be fully supportive of such application, should another party or parties undertake the task as intended. i.e. Global Challenges Foundation overall global improvements interest are compatible to spreading or helping spread access to these crypto-tools to the people of the population as doing so inherently brings participation awareness of the global issues.

2. Global Governance business:

Global Governance is the business, of the people, to generate benefits the world population shares. Global Governance tasked to the UN as a matter of where UN funding ultimately comes from, the people.

Representatives of the UN General Assembly are to provide transparency assurance information to the people. In other words: The information of what Global Governance business Implementors want funding for, where individuals of the population may decide how their measure share of the total available funding, shall be used. Understanding if the people do not know what their Global Governance business Implementors want funds for, Global Governance does not get funding for it. Alternatively, individuals may allocate their crypto-measure, or some portion of, to the direction choice(s) of the Global Governance business Implementors. (disclosed or yet to be disclosed as to provide a buffer to smooth out final results or address yet unknowns issues that arise.) The same alternative regarding unused crypto-measures directed to tasks by crypto-votes.

Global Governance transparency information to be framed "Simple and Clear" in its presentation. Spending history and accomplishments being relevant, included in the presentation. Public internet access to such information with general overview but allow the people to look deeper into the details and allocate their measure at what effective level they so chose.

Simply put: UN General Assembly Representatives are to produce Annual Reports, Accomplishment History, and Funding Requests, to the People in a manner that also allows the individual to apply their measure to, during a given period in which do so. i.e. Three consecutive months of each year, ideally to coincide with such matters as when the individual is most likely to be thinking in relevant annual financial terms (i.e. tax returns). The currently presented categories of global issues to address, are the UN 17 STG's [10]
When what Global Governance presents for funding span to consume more than 80% of the available funds to produce acceptable results, the people have an opportunity to apply crypto-votes to determine the priority. The chosen top priority issues, equaling 80% of available funds, are presented for measure allocation. Should initial measure allocation result in not enough funding to achieve acceptable results of any presented issue, the outcome is made available to the Public. Then crypto-votes determine unused crypto-measure placement so to fill acceptable result needs and any additional items in priority order that can obtain acceptable results. The 80/20 rule of thumb, is a starting point, open for adjustment in the implementation and normalization of the feedback loop.

Regarding “Available Funding” - As a matter of ramping up the use of the crypto-tools, the available funding for crypto-tools use direction vs. total funds received by the UN has adjustments for acting as an additional buffer to address the Global Governance business Implementation team reasonable concern of the unknown. However, the goal of the Global Governance business, not just part of, is directed by the voice of the people of the full population. If only 50% of the population has access to the crypto-tools and use of, then the reasonable concern of the unknown would be regarding what the other 50% might choose should they exercise their choice making. But not having a choice option, is not a voice, but a denial of voice. In the situation where a government is intentionally denying the people voice, the penalty of non-participation is applied against that government by their removal from the United Nations General Assembly and therefore from the Global Governance business Implementation team and not allowed to present their global concerns.

The solution direction is not about controlling the internal affairs of a nation states but about addressing global level issues which affect everyone. So not to aid in the complete denial of the people’s voice under such denial, one-quarter (25%) to one-third (33%) of the denied voice population's crypto-measures are available in the crypto-measures “unused pool” for crypto-voting direction.

The UN General Assembly shall avail itself of all external resources of quality research relevant to global issues. The external research should also be made available, in both summary and detailed form, to the people to review in their decisions making process. See also section "D" Artificial Intelligence (A.I.) Safety Use.

3) Communicated and Understood.

It is to be communicated and understood by all participants about “Funding Constraints.” What all is decided upon to present to the people to apply their votes and measure to, needs to be compatible to the Universal Declaration of Human Rights and work within the nature and purpose of the people’s business of Global Governance.

In Summary:

The UN General Assembly representatives need to know what the Global Governance population's directions are, so to best represent the people of their nation in a compatible manner to the Global Governance budget setting, in addressing global issues. Using the feedback loop, enabling a productive transition.

Either individuals of the population take charge of their equal measure share of funding their business of Global Governance or others will. However, not allowing individuals a voice where it bottom line counts is simply not conducive of the Universal Declaration of Human Rights.

Tools of measure allocation, be it crypto-tools as mentioned in this paper or allocation paperwork is required, providing the people a bottom line financial voice of their Global Governance business direction, and thus enabling a feedback loop of productively addressing global issues.

The publicly accessible annual results can be of value to individuals and all manners of functional
organizations. i.e. communities, businesses, industries, governments at various levels, and more, to consider in their changes, if any, to be in accord with the results of the public direction of the Global Governance business, so to amplify the productive outcome sum.

Regards, an Individual voice in Global Governance,

[sign]
(optional contact information. i.e. email, mail, phone)

---- (D) ---- Artificial Intelligence (A.I.) “Safety Use”

The general tasks for the A.I. industry as a whole and an A.I. look ahead system supported by the UN.

1) Help promote and educate the public with an applicable understanding A.I. is nothing more than a running extension of our knowledge and never put A.I. before ourselves.

2) Create the A.I. system for generating and presenting the spectrum of look ahead possibilities of the use of our limited human resources, natural resources, knowledge and our extension of these to the people of the population, for their review, consideration of direction choices, regarding global issues.

Human and natural resources, knowledge and our extension and use of these have enabled us to make significant advances, but not without the extreme downside of war and damaging the environment in which we live. As knowledge directs our use of human and natural resources and extension of artificial intelligence is most certainly relevant now and more so as improvements in A.I. application to the given solution direction happen.

Our main handicap to productive global teamwork advancement is the reasonable fear of the unknown. Unknown how some will error, respond to counter or abuse advancements in various fields, industries, politics, including unreasonable fear, but never is there action without reason, real or imagined.

Although there are many uses and potential uses of A.I. for both good and bad the most dangerous is likely being overlooked. That of putting A.I. before ourselves. Like having governance for the sake of governance, but forgetting the people the governance is for, of and by. Even in our history long before computers and A.I., we have experienced this danger as tyranny and government(s) against others in a war for the sake of political ideologies and the taking of natural resources. Always at the command of the few, regardless of the mass majority of the population not wanting the expense or damage of war or its ongoing loss of the potential to have done better. With A.I., it would be like a missile using a feedback loop but disconnecting the external source of input the feedback loop needs and routing the output directly to the input, resulting in no proper feedback.

Even today, putting A.I. before the people is happening in subtle ways leading or allowing the people to perceive A.I. as disconnected from them, that it is somehow better than us, rather than an extension of ourselves needing our direction and feedback. i.e. A.I. use in applications where it tries to mimic the user's choices so to automate choices the user might make and not allow the user to do otherwise with ease but a battle against the A.I. to do otherwise. i.e. online spell checkers, word auto-completer, ad choices and more. Moreover, knowledge bases A.I. may access like Wikipedia, which is not reliable for honest, complete and unbiased information, but by policy, Wikipedia puts legal responsibility on external source references. The sum of widespread A.I. can very easily, yet unintentionally, lead to underlying population frustration and stress level increase and even reduced human productivity.

Considering how A.I. is and will continue to be promoted, advertised, used, perceived as something before us to “guide us,” the danger is real, and it exists today.

So how do we assure A.I. is never put before ourselves, that the proper feedback loop is established and never broken? The "Trillion Dollar Bet" of the 1990's was disarmed, from ever again causing the
damage it did, by publishing the formula used. With many using the formula, enough balance established preventing ultimate damage results. With this in mind, the answer to preventing A.I. from being put before us is to educate the population, so they understand A.I. well enough they never put A.I. before themselves. However, given the broad range of A.I. implementations, this might seem a difficult task to accomplish, but only a matter of recognizing the basic tool set and usage and using these to educate the population.

We all learn math starting out with what the Hindu-Arabic decimal system symbols mean, and then the arithmetic operators of addition, subtraction, multiplication, and division and how they work. Not everyone learns algebra or calculus, but we learn enough basic math to use it in many ways including in economics. As any mathematician will agree, no matter how complex the math formulas become, the formulas all resolve down to acts of addition with the only difference being the time it takes to calculate the equation. Likewise, there is a small set of action constants both we and our A.I. extension cannot avoid using. The actions constants may seem second nature obvious to us when presented, but we are the creators of software which has to be instructed to use these action constants, and therefore A.I. is never more than an extension of our knowledge. As a stone (hardware made of hardened earth) image (human abstract thought processes) of our fail-able selves.

The action constants are required, recursive and unavoidable, in making and using abstractions. These action constants are the basic elements of Abstraction Physics [11], not unlike how the Hindu-Arabic decimal system symbols are the basic elements of the mathematics we all learn. The action constants in an online “Virtual Interaction Configuration” application enables education of A.I. as an extension of ourselves.

As the basics of math can be extended in use to very complex equations as used in AI, so can the action constants be used for mapping and navigating knowledge "Knowledge Navigational Mapping" (KNM) The use of such KNM can present the spectrum of possibilities, destructive vs. productive, in the use of our limited human and natural resources and extension of these, in a look ahead manner. Today we do this manually in general terms and in time can fill in ever greater details using our knowledge extension of A.I.

When the people of the population knows what they can achieve, and how, in teamwork beneficial to all, including themselves, they will strive to achieve it, if allowed. A.I. KNM can be used to present to the population of individuals a spectrum of look ahead possibilities of using our human and natural resources and knowledge of “how to.” Not unlike the game of GO and A.I. AlphaGo [12] look ahead to win.

“Safety Use” of Artificial Intelligence is accomplished by not putting A.I. before us as individuals of the population and recognizing its value to present us with the look ahead possibilities. Then teamwork is applied to catch errors, exceptions, concerns of potential abuses, and so forth regarding what the A.I. presents in its spectrum of possibilities. A UN Global Governance online forum is useful for the teamwork.

______________________________

Arguementation demonstrating how the model meets the ASSESSMENT CRITERIA:

Entries will be assessed based on how well they can be expected to manage global challenges and meet the criteria listed below:

a) **Core Values**
Decisions within the governance model must be guided by the good of all humankind and by respect for the equal value of all human beings.

*Check, double check, Inherent!*

b) **Decision-Making Capacity**
Decision-making within the governance model must be possible without crippling delays that prevent the challenges from being adequately addressed (e.g. due to parties exercising powers of veto).

*Check, Applying timeline constraints for making decisions.*
c) Effectiveness
The governance model must be capable of handling the global challenges and risks and include means to ensure implementation of decisions.

Check. Presented for decisions only tasks/issues capable of being implemented.

d) Resources and Financing
The governance model must have sufficient human and material resources at its disposal, and these resources must be financed equitably.

Check. Already existing via UN funds from the various nations and other sources.

e) Trust and Insight
The trust enjoyed by a successful governance model and its institutions relies on transparency and considerable insight into power structures and decision-making.

Check. Inherent!

f) Flexibility
To be able to fulfill its objectives effectively, a successful governance model must contain mechanisms that allow for revisions and improvements to be made to its structure and components.

Check. Inherently required in a new decision-making process the flexibility in various facets for the ramping up of the decision-making and implementation optimization.

g) Protection against the Abuse of Power
A control system must be in place to take action if the organization oversteps its mandate, e.g. by unduly interfering with the internal affairs of nation states or favoring the special interests of individuals, groups, organizations, states, or groups of states.

Check. The established feedback loop inherently exposes any misuse and abuse. Those responsible for implementation violation have themselves chosen not to participate and removed from Global Governance Implementation process.

h) It is a fundamental requirement of a successful governance model that it performs the tasks it has been charged with, and the governance model must include the power to hold the decision-makers accountable for their actions.

Check. Feedback loop inherent.

References and Note*:


