

1. Abstract

In a world of 7 billion people, a room full are not enough to make international decisions.

United Intelligence aims to crowdsource 3.7 billion internet users.

During my last 18 years developing complex systems, I've noticed that any company that's serious about software development has had to drop the approach that was once popular, and adopt a very different one. The gist of the old, risky approach being someone spending a year or so writing a technical specification, handing it to the developer, who works on it for a year or two, and delivers something which usually does not satisfy the customer's requirements, because of the fact that **when a system is complex enough it is almost impossible to get it right the first time** .

These days most software teams use an agile methodology, which has a goal and a set of principles. The process itself is continuously improved by the team. The development is done in short cycles of two to four weeks. The requirements for a cycle are short and simple. Development is done quickly and then thoroughly tested. A retrospective is conducted at the end of each cycle to figure out what could be done better next time. The software is demoed, new requirements are generated and the next cycle begins. Software these days, like apps on your phone are continuously being updated. They are never considered to be done. **They can always be improved** .

By reading books on thinking I've learned to assume that **nothing is ever perfect** , and to keep asking myself "What can I do to make it better?"

Thomas Edison invented the light bulb. It must have been amazing, after hundreds of failed attempts to finally make a bulb that lasts long enough to be useful, but it wasn't perfect. I recently replaced a 100 watt bulb with a 14 watt bulb that is just as bright.

There was a rumour that Bill Gates once said "640k ought to be enough for anybody." It was over 10 times better than my first computer, and so computer manufacturers could have stopped there, satisfied that the computer was perfect, but they didn't. I now have a 16,000,000k computer and my internet speed is 2,000 times faster than it was 10 years ago.

Computers and software are still not perfect, and they never will be. There will always be a lateral thinker somewhere asking "What can I do to make it better?"

The United Nations and governments are like old software, designed with a large set of requirements, and then simply implemented in one go. We may have been proud when the United Nations came about, or when democracy was implemented in a former dictatorship,

but future generations will laugh at our primitive systems, especially if we were arrogant enough to say “This system ought to be good enough for anybody.”

The most important function in my system, that makes it more suitable than any decision making system that I know of, is to improve itself simply by being used. Any complex system that you may come across in this challenge, **if it is not designed to continuously improve itself, it will be unlikely to work as expected in the real world**, just like the United Nations and governments.

The system I invented is called *United Intelligence* (not its real name). I wrote a chapter about it in a book about the future of politics and my idea won first prize (worth €2,000) in a competition sponsored by London Futurists and Singularity University.

United Intelligence, like agile software development, has a goal and a set of principles, and it constantly updates and improves itself.

Rather than being extremely complicated, with a design where every possibility is considered at the start, it was designed to start out small and scalable, able to evolve into a massive, international decision making system like a planet sized brain, far beyond what the United Nations has ever been capable of, using its goal and core principles to focus its evolution into a system that anyone can use and follow a well defined path to *make the changes that they care about*.

The Goal

The goal is simply to *increase happiness and unity worldwide*. I think if you understand what happiness means to you, then that works as a goal, but as with the other aspects of the system, the definition of the goal can be improved by the system itself.

The Principles

1. Directly Democratic

Anyone (not just a government or group) can provide suggestions, questions and arguments, and anyone can vote and volunteer (help to implement an accepted suggestion).

2. Self-improving

The system is designed to continuously improve itself through use. Users can create suggestions for improvement and volunteers can implement the suggestions.

3. Gamification

Points are earned by using the system well and providing evidence of expertise. Points are categorized by area of expertise. This encourages people to gain knowledge and use the system well, and is also used by the next principle...

4. Meritocratic

Arguments and votes are weighted based on points in various subjects.

5. International

While some topics only apply to certain regions, the system itself is international. The idea is to unite the world, and means that the system can even spread into countries ruled by dictators, rather than being specific to a single country.

6. Critical Thinking

A user has to provide evidence that they have sufficient knowledge of subjects such as cognitive biases, logical fallacies, the scientific method and basic statistics before their votes or arguments have any weight.

7. Transparent

Every suggestion, question, argument and decision is via text or video, and therefore recorded and available on the website. The precise process for providing evidence of expertise and increasing points is provided on the website, therefore any member of the public who wishes to make a difference has a clearly defined path to *make the changes that they care about*.

2. Description of the Model

United Intelligence is self-improving. This means that the version that exists today could be completely different to the version that will exist next year. The model described here is based on the prototype that I've already built, and is online and being used.

Problems with Current Systems

While writing the essay that won the competition I was thinking about governments, and how United Intelligence could eventually make them and country borders obsolete. The system was designed to unite people regardless of what their flag says about them, which is the same goal as the United Nations, so it could just as easily make the UN obsolete. In my essay I identified a number of issues with democratic governments that exist today. Now that I'm writing this with the UN in mind, I realize that any system you may be judging could have similar problems to the governments that I'm trying to make obsolete, so here is a shortened list of problems with governments that I identified, which may apply to other decision making systems.

1. Lack of Transparency

Lack of transparency in governments means they can get away with doing things that the people don't know about. This can lead to corruption, lack of trust, and anarchy.

2. Manipulation of Democratic Systems

A problem with democracy is that money affects votes. According to the UK's electoral commission(4), £31.5 million was spent on election campaigning in 2010. That's not only inefficient, but spending that kind of money to persuade people to vote for a particular party makes the democratic process seem undemocratic.

3. In a Democratic Vote, Knowledge, Intelligence and Diligence Don't Matter

People believe different things, sometimes because they've researched it for years, and sometimes because it's the first thing they were told. It's incorrect to assume that the majority of voters know better than the minority, but democracy appears to ignore this problem.

4. Lack of a Systematic Method to Change What We Care About.

Petitions, striking and demonstrating are evidence that, when we want to change the world around us, we have no decent system to use.

Petitions often don't work. There are usually no requirements for the number of signatures, and often no official person to send the petition to. They are arbitrary claims that at least a certain number of people want a specific change, but do not mention how many people refused to sign. They can be generated from misinformation about something that may not be true, and stir up feelings of anger, and when they are posted off into the void, they become anyone's guess as to whether or not something will be done.

Strikes, in my experience, seem almost regular, like a public holiday, by people performing important services like transport, education, mining and security. Transport strikes disrupt millions of parents trying to get home to their children, and holiday makers trying to enjoy what little bit of time they have away from their stressful jobs, and the next month they will strike again, and continue to earn the same, low salary.

When these don't work, people turn to demonstrating, which can turn into riots, and when nothing changes, civil war, simply because people don't have *a systematic method to change what they care about*.

I would like to suggest therefore that the kind of system that would be far more effective at making the world a better place and achieving peace would be a directly democratic, self-improving, meritocratic, international, transparent system based on critical thinking, with a well-defined goal.

Gamification

Gamification is like the prize in this competition. Even though most of the entrants want to change the world, there are 1000 times more entries because of the prize.

Gamification gives the user goals, shows their progress, and awards them with rewards like points, badges and medals.

I'll explain how effective it can be with an example of a modern system:

StackExchange(5) is a group of websites, each for asking and answering questions about a particular topic.

On StackOverflow(6), their sub-site for programming questions, a well written question, based on their guidelines, usually receives the correct answer within minutes. I'm not quite sure if that explains just how incredible the system is, so let me try another way: One can either spend hours or days trying to solve a complex programming problem, or type it into StackOverflow and have it answered in minutes, for free!

So, how does StackOverflow's gamification work?

Everyone can earn points by asking questions, answering questions, doing reviews, improving formatting, etc. One earns these points democratically, by other people looking at what one has done and awarding or deducting points. Once one reaches a certain number of points, one is considered more trustworthy or knowledgeable and therefore more functions are enabled. The details are quite complex, but the system has been shaped over many years into today's elegant solution.

How United Intelligence Works

The following are the nuts and bolts of how the current version of the group decision making system works. The system is in its infancy, and will evolve as more people use it. As the system evolves, the How It Works page will be updated.

1. Tags

A tag defines an area of knowledge. Tags are used for categorizing questions, suggestions and points.

Tags are arranged in a hierarchy, with the *Critical Thinking* tag as the root. All other tags are descendants of *Critical Thinking*. A tag can have multiple parents.

What this means is that, in order to learn a child tag, one should learn a parent tag first. This rule is only enforced when the system grows large enough that there is a range of competencies in a parent tag.

The reason that the *Critical Thinking* tag is at the root is important:

I think of critical thinking as a bag full of the best of hundreds of years of thinking principles. These principles are vital to understand in order to make good arguments, be less biased and make fewer mistakes. It comprises important topics like logical fallacies, how statistics can be manipulated or misunderstood, cognitive dissonance, open mindedness and the scientific method. I would love critical thinking to be a compulsory subject for everyone to learn.

The *United Intelligence* tag is the second most important tag. It's the tag to be used for suggestions to improve the system itself. It is what makes the system self-improving.

When creating a question or suggestion a user will tag it with the knowledge or skills required to have a useful opinion on the matter. It is important that a suggestion is tagged correctly, as this ensures that the votes of people with high competency in those areas are weighted higher than others. Users can therefore also vote to accept or reject a tag on questions and suggestions. The votes are weighted by the competence level of the voters. Votes on tags need to exceed 50% and a threshold in order for the tag to be accepted.

2. Points

Each user has points for each tag. Points are used to encourage users to use the system often and well, and to distinguish between levels of competency. These levels change dynamically, depending on the number of users on the system and the number of points that they have. As more people accumulate points the number of points required to be considered *competent* or an *expert* will go up automatically.

The calculation ensures that each tag will always have a reasonable number of competent and expert users. The variables for the calculations are configurable.

Currently points are acquired by using the system and by passing and marking tests. The way in which points are accumulated is likely to change. For example, it may be decided that

a person who writes the highest rated argument on a suggestion gets points for the tags that the suggestion is tagged with. Another potential improvement could be to allow people to vote on specific attributes of the quality of the arguments, such as the quality of the evidence provided, and in so doing, the writer could gain or lose *Critical Thinking* points.

3. Creating suggestions

All users can create suggestions.

Suggestions can be anything that will help towards achieving the goal.

Users are asked to consider the following criteria for a good suggestion before creating one:

"It should either not have been previously created, or there should be a good reason for creating it again, such as different circumstances, or because it worked well last time and should be tried again.

It should be as efficient as possible. In order to think out of the box, try to think of a suggestion that could be 10 times as effective or 10 times quicker to implement.

A suggestion should be accurate. Give enough detail so that the volunteers who implement it know exactly what to do."

4. Ranking a question or suggestion

The rank indicates how important a question or suggestion is to users. A user can indicate if they consider it important or not, and the rank is the count of the positives minus the negatives. The highest ranked ones will go to the top of some lists and therefore usually get processed (answered or voted for, and subsequently implemented or rejected) first.

5. Writing an argument

A user can write an argument giving evidence as to why a suggestion should be accepted or rejected. Arguments are sorted by the author's competence in the suggestion's tags.

Users are encouraged to consider the following criteria for a good argument before writing one:

An argument should...

Be objective and unbiased.

- Refer to reliable sources.
- Not contain any logical fallacies.
- Be based on evidence where possible.
- Be respectful.
- Show open mindedness.

(The above also applies to answering questions)

A suggestion will go into the *voting* state once sufficient time (currently 2 days) has passed since the last argument was written. This allows time for updating arguments based on other arguments.

I imagine that the system will evolve to enable users to vote for a longer period to write arguments for complex suggestions.

6. Voting for a suggestion

If a user's points are at the competent level for a tag on a suggestion in the *voting* state, they can vote for or against that suggestion.

Once 4 days (configurable) have passed since the suggestion moved to the *voting* state, it is either accepted or rejected. A suggestion is accepted if at least 60% of the votes are positive. The bar is higher than 50% because change should only occur if the value of the change outweighs the effort to make the change. An accepted suggestion can be picked up by a *volunteer*.

The system currently only supports binary voting (for or against). Obviously there are times when you could agree with part of a suggestion, but not all of it, or think it needs to be tweaked slightly. As the system is right now, a user would need to specify the change that they want as an argument on the suggestion, vote against the suggestion and then create a preferred suggestion. A potential improvement could be enabling voting for various configurations of a suggestion, for example with variables, such as the amount of money to spend advertising the effects of climate change. People could then vote on the variables and whether or not to accept the suggestion. I expect that the voting system will evolve quickly.

7. Volunteers

Volunteers are users who are willing to take the lead on implementing an accepted suggestion. Examples might be sending an email, updating the source code of this website, voting for a political party, making a video or leading a project. It is up to the volunteer to decide what they're willing to do, and which accepted suggestions they'd like to implement.

When the system grows large enough or is used by a government or non-profit organization, **it is likely that some of the *volunteers* will be paid** to implement suggestions.

Volunteers can assign accepted suggestions to themselves. They complete them and mark them as done when they're completed. In a more evolved version of this system, I imagine that *volunteers* will view a queue of most appropriate suggestions for themselves, perhaps based on their points in each tag, as well as their preference and region.

8. Asking a question

All users can ask questions.

Asking questions helps people use the site and create more appropriate suggestions. It can, however, be used for any question, relating to anything, and may be useful for attracting users. The system is designed to attract well informed answers, and I expect that, as the system matures, its complexity will attract better answers than sites like Quora and Yahoo Answers.

The user who created the question chooses all the tags for it. The tags define knowledge that a person needs to have in order answer the question.

9. Answering a question

Any user can write an answer to a question. Answers are sorted by the author's competence in the suggestion's tags. Tags are verified in the same way as for suggestions.

10. Creating a test

Any user can create a test.

A test is a single question relating to a single tag, which a user can answer to earn points for that tag. This is good for the current version of United Intelligence, because it was simple to implement. I expect it to evolve to use third parties, such as university or online education APIs / web services to extract information about a user's knowledge and skills.

Users are encouraged to use the following criteria for a good test before creating one:

The test should not have been previously created.

Ideally, the answer should not be easy to find by typing the question into Google.

To do this, one can describe a scenario and ask the user what is wrong with it, or to explain what the scenario is an example of.

A user can choose a single tag for the test, defining knowledge that a person needs to have in order to answer the test.

Users who are competent in the tag can vote for or against the test. A test is accepted if at least 60% of the votes are positive.

11. Answering a test

Users can answer any tests where they are competent in the test's tag's parent tag.

To encourage users to first learn about the topic before answering tests, 20 points may be deducted when starting a test (if the user has sufficient points) and then returned to the user when the majority of markers (users who mark a test) have agreed that the answer is good. If the majority of markers agree that the answer is good, then the user gets an additional 20 points.

Users are instructed to fill in an answer which shows that they understand the subject.

12. Marking a test

Marking a test is an easy way for users who are already at the competent level in a tag to earn more points for a tag. Multiple markers (configurable, currently 2) will mark a test. The majority of them who agree to pass or fail the test will earn 10 points for the test's tag. The minority (if there is one) will lose 10 points.

13. Identity

Users can currently register with a pseudonym. This is based on [David Stodolsky's article](#)(9) entitled Computer-network Based Democracy. His idea was that, in a computer-network based democracy, just like in a normal democracy, one could be more easily influenced if people knew who they were: "One way to protect expression of opinion is to strengthen personal integrity with an anonymity shield."

There is of course a problem in that a person could create multiple identities and vote for their own suggestions and mark their own tests.

In the future, I expect the system will evolve to use something like [Michael Hrenka's Quantified Prestige idea](#)(10). The gist of it being that the more evidence the system has that

the person is a unique individual, the more weight we add to their actions (like the points on a tag), or perhaps they can only vote if they have 10 identity points. For example, a person could register with just a username, email address and password. When they verify their email address, we could give them 1 identity point. If they add a mobile number and we verify that, we could give them another 2 points. If they give us a copy of their passport, it could be another 2 points. If they have a Facebook profile with more than 100 friends, another 4 points. Maybe they have a trusted friend on the system who can verify their identity, etc. Eventually, it would be nice to connect the system with some sort of third party identity provider which can give even greater evidence of identity (or this system could itself become an identity provider).

Example of Use

It's probably easiest to understand the system if I give you a simplified example of how someone might use it after it has matured into a global system. Later on you'll come to a section on *How to Make it Grow* where I explain how the system can grow exponentially. In order for the system to achieve its goal of universal happiness and unity, it is essential for it to grow massively. The example of use that you're about to read assumes that the system has grown to a point where many influential people around the world, such as politicians, have become *volunteers* in the system (some unpaid and others may be paid by either their government or the system itself).

Keep in mind that this is just an example, and due to the system evolving, the experience could be completely different.

Perhaps you, as a user of the system, came up with the idea that all countries should ban the production and import of vehicles that emit greenhouse gases, so you go to the website and type your suggestion, "Ban the production and import of vehicles that emit greenhouse gases."

The website gives you a list of similar suggestions, and noticing that the same proposal is already on the system and is ranked 27,393 (100 positions from the top of the queue), you click the up button to increase the rank of the proposal and write an *argument* (or point) explaining why it would mean so much to you.

The proposal now is ranked 27,394 and with its new value it is bumped up to position 99 from the top the queue. Within the next few weeks a further 7,433 people increase the rank of the proposal and it eventually reaches the number one place in the queue. Your argument on the proposal has been noted by many people and voted up so that it is number twenty in the list of arguments. The argument at number one is made by a well known user, who has accumulated 483,232 points. He's made a video giving detailed graphs giving both the pros

and the cons of the idea, as well as alternative suggestions. In the text of the argument he's listed ten references to relevant scientific studies.

10,000 people vote on the idea. The votes of the 100 users who have earned the most points for the *Environment* and *Economics* tags are each weighted 10 times as much as your vote.

55% of the weighted votes are in favour of the idea. Since this is less than 60%, the proposal is disapproved, and you are not happy. You believe that the system is faulty and you should be one of the people with a large number of points, so your arguments are rated higher and your votes have more weight. For this reason you need to increase your *Environment* and *Economics* points to at least 10,000 each, which is considered *Expert Level*. This takes a lot of work.

You answer some *Critical Thinking* tests, which bump up your *Critical Thinking* points from 50 to 100. The system now considers you to be competent in critical thinking and you can start earning points in other subjects / tags. Then you read all of the recommended books... some history, some logic, some science, some psychology, biology, economics, etc. One of them doesn't appeal to you, so you create a suggestion that the book is changed. Eventually you do all the tests on the books that you read and your points in the *Environment* and *Economics* tags are bumped up to 1,000 each. Through marking tests and contributing well thought out arguments, you bump your points up a few thousand more. At this point, however, you find that since other people are joining the system and gaining points, the bar to achieve *Expert Level* has gone up to 12,000 points. While the weight of your votes and ranking of your arguments has improved, it's not as high as you had hoped, but the system does now allow you to become an assistant to an expert.

You go to the *how it works* section on the website and follow the strategy to become an expert's assistant. You make amazing videos that experts include in their arguments and this eventually earns you the points to be an expert. The next time a suggestion to ban greenhouse gas emitting vehicles makes its way to the top of the list you are ready with your well researched argument and video on how amazing the world would be if such vehicles were banned.

Your video is watched by 30,000 people and the suggestion gets 80% positive votes and is accepted. Because it has been accepted, *volunteers* around the world are notified. Some of these are politicians, some are marketing experts, some are journalists, some are wealthy business owners, and the rest are hundreds of thousands of voters and potential vehicle purchasers. Through the efforts of the marketing experts and journalists, news of the suggestion being accepted is revealed on CNN and BBC news. Through the efforts of politicians (already knowing that the intellectual population are backing them) many governments adjust their laws to make it difficult to import or manufacture greenhouse gas

emitting vehicles. Not only is this a top-down change, but the people also start to get into the spirit of switching to environmentally friendly vehicles and boycotting companies that don't switch.

Unfortunately after a year the new policy hasn't worked out as well as you'd hoped, because half of the world still use petrol vehicles, but since there is a democratic way to change things, people propose an even better solution and the better solution is implemented next.

Of course this is a rough idea of how United Intelligence could work in the future. You may find faults in this solution, which is fine. The actual future implementation would be thoroughly discussed, tried, tested and thought out and would become more complex as it matures and improves. The main point is that it is self-improving and focused. While existing political systems sometimes have the ability to improve and mature, they are very difficult to change, and can only be improved up to a point, because ultimately their purpose is often to stay in power. They will not hand over the reigns to a system which makes them obsolete. The purpose of the solution I'm proposing is not for it to remain in power, but for it to improve itself, and recursively replace itself with better systems that also generate solutions.

The system could be used not only for international change, but also for smaller groups, like charities or researchers, trying to figure out the most efficient way to solve a problem.

But imagine if it was used internationally. Imagine if you could see a clear and well defined path that you could take to suggest any change, or become an expert on any matter so that your knowledge, experience and desire for change could make a difference.

How to Make it Grow

Currently the system relies entirely on me, working on it in my spare time, in order for it to do anything. The challenge that I have set for myself is to get the system to grow to a point where it can grow by itself and I am no longer required. Based on my observations of systems like Facebook, Google and StackOverflow, that stage will occur under the following conditions:

1. There are **enough users that there is constantly new information** (new suggestions, questions and arguments) like a Facebook wall. The effect will be regular visits to the page, in the same way that people check the news every day, or their email, or Facebook page.
2. The system is regularly implementing **suggestions that the users are excited about**.
3. There are **enough volunteers** (some may be paid, possibly via donations through the system) that **suggestions are completed quickly** after they are accepted.

#1 is the simplest of the three. Users are easy to obtain.

There are no shortage of people who want to offer suggestions. A simple advert, or even the publicity from winning this competition, would bring that about, and it only needs to happen once, as long as the other two conditions are in place, because the other two conditions will bring those users back, along with their friends. Even a few users who create a couple of interesting suggestions every day should be enough of a starting point for people to want to visit the site daily and share their arguments.

#2 is solutions that the users are excited about.

The system may have to begin implementing changes in a few niche areas of interest, where solutions can be implemented without lots of money, and perhaps only a few volunteers, but still generating very exciting results. Once it is established it can spread into other areas.

Here are some examples:

United Intelligence itself. Improving the system, making it look and feel very slick, easy to use and of a high quality is an obvious area of interest. This could potentially be done by a single developer, such as myself, however it would have to do something else as well, otherwise it doesn't really serve a purpose.

Open source. United Intelligence could start out as a decision making tool for other open source software. Since there may already be 1,000,000 programmers creating open source software(3), volunteers shouldn't be hard to find. United Intelligence could help open source developers to decide what to focus on. Projects could be anything from computer game modifications(2) to open source artificial intelligence, such as OpenCog(11). Engineers could help to design open source house construction machines(19).

Charity /Non-profit organizations. United Intelligence could have its own charity, where the software is used to decide how best to use its donations and volunteers. Perhaps something similar to GiveWell(12).

Profitable business. In order to generate funding for United Intelligence solutions, the software could be used to start a profitable business. The success of the business would depend on the quality of the decisions coming out of United Intelligence, so it would also be a good way to test the system and look for ways to improve it.

Research. United Intelligence could be used for surveys in order to find information that would help answer important questions, or find better ways to accomplish its main goal.

#3 is having *enough volunteers*.

This would be boosted by both #1 and #2. It could also be funded. The publicity of winning the competition would help to get funding to employ some solution implementers and attract *volunteers*.

Once the above three conditions have been met, there should be sufficient interest for the system to run and grow by itself. It would then have to progress into other areas to attract further *volunteers* and funding.

As a self-improving system, it will continuously become better at self-improving. This recursive improvement will fuel it to become an exponentially quickly growing system as soon as it reaches that critical level of interest. Like Facebook, Quora, Wikipedia and StackOverflow, once a website is useful enough and starts growing exponentially, it doesn't stop until it becomes a worldwide system.

Examples of Solutions of a Worldwide System

If you imagine living in a world where the billions of internet users use United Intelligence as their regular tool for *making the changes that they care about*, here are some of the exciting ways in which the world of politics could be different.

1. Democratic Elections

Some countries may have governments that are run by United Intelligence. They could be entirely leaderless. Multiple countries run by United Intelligence might merge together, seeing as the focus of the system is unity.

For other countries, where presidents are still elected by the old systems that are in place today, many voters could be *volunteers* in United Intelligence, and therefore use United Intelligence to decide who to vote for.

If we lived in a strange system where people voted for the best programmers to hire to work in a company, the obvious way to vote would be simply to vote for the programmer with the most number of points on StackOverflow. That programmer is JonSkeet(13), with 937,235 points at the second that I'm writing this. Unsurprisingly, he works at Google.

Quotes from StackOverflow users:

I got my job at Google because of my Stack Overflow profile. -Mystical(306,385 reputation)
(14)

Look at the first page or two of Stack Overflow users... it's obvious those people are all some of the best programmers you could ever hire...

...go right to page 100 where they have reputations in the 3000 range... these are all obvious superstar programmers... the kind that most teams would kill for.

Will this actually get them jobs? Ultimately, we're betting it will. - JoelSpolsky (Co-founder & CEO of Stack Exchange)(15)

My presence on StackOverflow very certainly helped me get my current job - I now work for... Stack Overflow!...

...I was also contacted by a Google recruiter who (when introducing themselves) directly cited my Stack Overflow posts – MarcGravell (658,801 reputation)(16)

In the future, where people are rated on a mature version of United Intelligence, the obvious way to pick a candidate out of a sea of potentials is to choose the guy with the ridiculously large number of points, rather than the one with the largest budget for his election campaign.

Interestingly, you could then get multiple countries wanting the same president, and I'd like to think that they could get the same president and their country borders would eventually become meaningless.

My next thought is why not simply let United Intelligence run their country instead of a president? Which is what I'd hope Democratic countries will be thinking.

2. War

One of the best things that I can think of, coming out of an international system that is used for politics, is that war between countries in which it is used would just not happen. If you lived in Palestine or Israel, and you wanted the **other** country not to fire rockets at you, how great would it be if your political system allowed you to say so?

The Future

A major future threat which concerns me could occur from a combination of:

1. Exponentially rapid technological advancements and...
2. The internet encouraging the formation of like-minded groups, which can lead to an increase in radicalization.

I imagine a future where 3D printers become advanced enough to print complex, miniaturized electronics, such as drones, the size of flies, from downloaded designs (Quadcopters smaller than a tealight candle already exist(7)). To extremists, miniaturization could mean mass producing tiny, undetectable weapons. Our current world, where 300 million file sharers per month(1) use sites that offer designs for 3D printed guns, indicates that no laws will prevent this from occurring. We need the whole world to unite, learn to think critically and collaborate on solutions. For some problems a top down approach may not be enough. We will need to promote a universal change in culture, a culture that values the environment, high quality scientific research and unity above prejudiced opinions and unjustified hope.

By the end of the decade, everyone on Earth will be connected.- Predicted in 2013 by Eric Schmidt (Executive Chairman of Google)(18)

Whether this prediction is accurate or not, internet usage is growing rapidly, as are the migration to internet based platforms for pretty much everything. I believe that United Intelligence, a virtual global brain, is the logical next step.

3. Argumentation demonstrating how the model meets the assessment criteria

A. Core Values

As mentioned before, the goal of the system is *to increase happiness and unity worldwide*.

The goal may be the first thing you notice when you open the website. It's there to focus every suggestion towards happiness and unity. The goal doesn't just include humans, but all conscious beings. While most political systems focus on humans, I hope that this system will eventually generate many positive solutions for animals as well.

In South Africa, the country where I grew up, we were divided into blacks, whites, coloureds and Indians, as well as rich and poor. The separation caused animosity between the groups. Without separating people into groups there cannot be a concept of war.

Wars are fought between religions, races and across country borders. Even civil war is fought between different groups; people who are categorized by their political preference, or their status. When people are united, and not classified into a group, they will not be able to find a group to fight. Unfortunately democracy encourages the formation of groups, placing people in boxes such as left wing, right wing, republican and democrat, instead of acknowledging that perhaps we are all members of the same species, each with our good ideas and our faults.

This is why unity is such an important part of the goal.

B. Decision-Making Capacity

A suggestion goes through a discussion stage and then a voting stage, before it is accepted or rejected and then addressed. Both the discussion and voting stages are time-boxed.

Some topics require more time than others, so I expect that a suggestion will soon be created to allow users to vote to extend the stages where necessary.

In addition, the system currently has the facility for users to rank a suggestion higher or lower.

This also affects the speed at which a suggestion can progress to the next stage. It allows them to get important suggestions implemented faster, because *volunteers* will typically work on the item at the top of their queue.

You may wonder what happens when suggestions have been accepted, but *volunteers* do not have the ability or desire to implement them. Currently they simply remain in the queue.

Users can still rank them down, so that they are forgotten about until the most important work is completed and they appear again. I imagine that a suggestion will eventually be created to allow people to vote to archive such a suggestion. It's fine that many accepted suggestions may never be implemented. It's important for the users to learn that if they want a suggestion done, they need to think of suggestions that people actually want to implement, and perhaps even consider volunteering to assist implementing them themselves. Hopefully this will encourage more volunteering.

C. Effectiveness

United Intelligence is similar to this competition, but an ongoing version, which tackles any problem and improves the way it does so. It's about uniting the billions of brains on the internet and focusing them into a factory that manufactures the best suggestions possible.

The greatest minds in the world are not the ones who happen to be employed by the United Nations or governments. The greatest minds could be the millions who had massive dreams to change the world, but the job market didn't cater for them, so they ended up building banking software during the day, and in the evenings their only opportunity to change the world is by voicing their opinion on Facebook, or signing a petition that may or may not ever matter. There are so many people who want to make a difference, but are frustrated. I come from the country described as the *protest capital of the world*, and once had to rush to fetch my wife from her job as violent protesters smashed shop windows and cars in the street where she was working. People need a clear and well defined path that they can take to suggest any change, or become an expert on any matter so that their knowledge, experience and desire for change can make a difference.

United Intelligence has the potential to be as effective as billions of internet users working together to implement ideas based on the brain power of billions of internet users. We need

the whole world to unite, learn to think critically and collaborate on solutions. For some problems a top down approach may not be enough. We will need to promote a universal change in culture, a culture that values the environment, high quality scientific research and unity above prejudiced opinions and unjustified hope; A culture in which we can work together to make a difference instead of leaving our future in the hands of Donald Trump or whichever political party we vote for that never gets into power.

It may not be the kind of system that has a large army that goes to fight a terrorist threat, but will rather be the kind that asks the question, "How can we deal with this threat 10 times more effectively, tackling its root cause and allowing the millions of people at home to feel like they can be useful and help somehow to make a difference that lasts." Perhaps its solutions will involve creating networks and support groups to help people involved in terrorism, or maybe it will be to sell them weapons that don't work, and track their location instead. Maybe its tests will evolve into a free online university that encourages people to learn about other cultures and critical thinking. Maybe it will pressure Facebook into encouraging its users to make friends with people of other cultures and beliefs. Maybe it will encourage us to think before we spend money, only buying products from companies with good values. Maybe all of the above. Whatever the solution, everyone can have their say.

Not only will this be the kind of system that tackles the biggest problems, but its potential size means that it can go much further to focus on generating strategies that use future technology to allow all people to live exciting lives and not feel like they have to do something they don't particularly care about in order to feed their families.

D. Resources and Financing

All of the work that I've done to design and build United Intelligence has been done in my spare time. I have a full time job, leading a team of software developers to write software for a mortgage company. I do my job to provide for my family, not because I have any interest in mortgages. I would much prefer to do things that really matter to me instead, and I would love to be able to work on United Intelligence full time.

The idea of the system was to be run by what I call *volunteers*, but in reality a mature version of United Intelligence could accept donations and pay some of the *volunteers* to implement suggestions full time. For myself, and I would assume this applies to most other people who expect to live a long time: I prefer donating time to causes than money. For example, I'd guess I've spent about 300 hours of my spare time working on United Intelligence. Based on my salary, 300 hours is quite a lot, however, I'd rather volunteer the hours than the cash. In fact I'd go as far as to say I'd volunteer about twenty times as much time as cash to a cause that I care about, but maybe that's just me. Other people may want to leave lots of money to

their favourite causes in their wills. Nevertheless, having a system that can use both is better than a system that can only use one or the other.

When it comes to cash, United Intelligence could generate ideas on how to fund its own growth, spending a portion of donations on advertising in the same way that charities do. When it gets big enough, United Intelligence can be sponsored by participating countries.

The US government spends \$600,000,000,000 on its military every year(8). I hope that, as a massive solution generating system, United Intelligence could come up with some intellectual ideas on how to convince the US government to spend a small piece of that pie on a system that could unite the world and make military expenditure obsolete.

The UN's regular budget for 2016 was less than \$6,000,000,000(17). That's less than a hundredth of the US government's military expenditure. I'm offering a solution that would only take a couple of million dollars (prize money) to gather enough momentum to run itself.

That's **three hours of UN budget, or two minutes of the US military budget**, which makes it a **very low risk** idea.

In a way, United Intelligence is an alternative economic system. Instead of relying entirely on paying workers, it uses gamification to multiply the intrinsic motivation of *volunteers*.

E. Trust and Insight

The original name that I called my system while I was designing it, was *Transparent*. The transparent principle is a very important part of the system, in that every word and decision is recorded and available for anyone to read. It's very obvious how decisions are made, and everyone can easily find out how to contribute to decision making. We could even make every detail of how everyone acquired every point available to the public, if users felt that it would be useful.

F. Flexibility

This again is a core principle (*self-improving*) of United Intelligence. It has been designed from the ground up to be as easy to change as it is to implement any other decision made by the system.

G. Protection against the Abuse of Power

The transparency of the system helps to protect it against abuse of power, as everyone can see exactly how decisions are made. The anonymity of users helps a little bit, but there's nothing currently in place to prevent a user from making their details known or selling their

profile, just like there's nothing to stop someone paying poor people to vote for a particular political party.

However, in the current configuration, an expert's vote is only equivalent to eight novice votes, so profiles are probably a lot more valuable to the individuals who put the effort into creating them and accumulated points over many years than to anyone else.

Also, since the system is so transparent, any user with many points would still have to supply high quality arguments to be taken seriously.

As mentioned previously, the system could evolve to have various levels of authentication, to ensure that people are who they say they are. There could be regular multi-factor authentication checks on particularly influential profiles. I would say it's a given that the system would have become very secure by the time it became powerful, as users would have insisted on strong security measures to protect their valuable profiles.

H. Accountability

If the decision-makers and volunteers are everybody, then accountability is simply that we are all accountable. If United Intelligence does anything wrong, it is our (the users') fault.

Final Thoughts

Thank you for taking the time to read this carefully and to consider it.

Maybe you can find some flaws in the idea. That's fine, in fact, I would not trust a solution that pretended to be perfect. The solution should be humble enough to know that it needs to continuously improve, so people who find flaws can simply head over to the website and write a suggestion for improvement.

As well as contemplating imperfections, consider the potential of this low cost and therefore low risk system and consider whether we can afford not to try this.

Imagine an international, virtual community, voting and discussing what to spend time, energy and money on in an organized fashion in order to achieve their goals.

My dreams are:

- That the system could expand to become so large and mature, that the best ideas for peace, happiness and unity leap out of it like popcorn.
- That petitions, striking, demonstrating, rioting and civil war become obsolete.

- That other, better systems emerge as a result.
- That eventually the entire world is part of a single system that works for everyone.
- That for finding information there may be Google, for getting your programming questions answered there may be StackOverflow, but for *making the changes that you care about*, there's United Intelligence.
- And who knows, maybe a massive, universal, virtual brain could even be smart enough to replace our economic systems with systems so smart that they allow people around the globe to do whatever they want and still have everything they need to be happy, while keeping our planet green.

What you can do

If you, personally, would like to get involved and help this kind of system gain momentum, feel free to email me at losthobbit@gmail.com.

You may have insight you can share, about problems that you foresee, or ideas for improvement, which is great. If you do, I'd love to have your involvement. As with any project I get involved in, I like to think of Thomas Edison, the inventor of the light bulb. Edison invented hundreds of light bulbs that didn't work before inventing ones that worked well. His famous quote is "I have not failed. I've just found 10,000 ways that won't work." Regardless of how well an idea works, it's important to keep trying and refining, learning from past mistakes. I hope we can apply this to politics, continuously trying out new ideas and making old ideas obsolete.

Thanks again,
Stephen Oberauer

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