

**Georgios Mavropalias**

# **The Blueprint of E-Democracy**



**A blueprint for the design, usage and implementation of an**

**Online Direct Democratic System**

“Direct Democracy is the one and only form of Democracy. All other systems are just different faces of Oligarchy.”

Georgios Mavropalias



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# Introduction

Democracy. The term originates from the Greek Δημοκρατία (dēmokratía) meaning "the rule of the people". The original definition was "The form of government in which the power comes from the people, is exercised from the people, in order to serve the people's interests". However Merriam-Webster gives us a more modern definition of "democracy": "a form of government in which people choose leaders by voting".

Leaders? If a society has a leader wouldn't it mean that this leader has the power, and exercises it? Can someone guarantee that this leader will exercise the power for the benefit of the majority of population and not for himself and his party?

- Direct Democracy: each individual is free to exercise the right to decide for himself.
- Representative democracy: individuals are free to exercise the right to elect their representatives.

Democracy through the ages has lost its meaning. Today democratic nations are led by representative democracy. If you reflect on it , we elect a few hundred people and give them absolute power. How is this Democracy? Just because we can elect the elite? Just because we can elect our rulers? We will never enjoy a true democracy if the political power is not evenly distributed among the entire population.

Davos (Switzerland) is host to the World Economic Forum, an annual meeting of the global political and business elite. The Davos Debates competition, hosted on YouTube, invites the public to upload a one-minute video highlighting their ideas on inclusive growth. The winner is

Democracy is when the indigent, and not the men of property, are the rulers.

Aristotle

selected as an informal YouTube community representative to participate in the Annual Meeting and take part in a special panel during the event.

This one of the few times the elite and the officials give a chance to the public to be heard. Why this has this been the exception and not the rule? And why do we have to have a competition for the best video, and not all the videos to be heard by everyone and not just the elite? A fraction of the population (usually few hundreds) **cannot** decide for the rest of the population. The entire population must vote for its wellbeing.

Democracy is not placing an X on a paper every four or five years. Democracy is an evolution, a daily practice that transcends both the society and the citizens to a higher quality of life.

Capitalism, communism, socialism, fascism or whatever corrupt political system is there, is not Democracy. Those systems are **economic** systems, meaning they regulate how the wealth is distributed among the people. If you are a fanatic of one of those systems and believe that only a particular party can bring prosperity to your country, then please stop reading this book.

However if you are like me, and believe that this fallacy of democracy that we have now, exists only because some few instilled and perpetuated, making us believe that it is our best solution, hang in there and let me show you what our democracy could look like.

## Direct Democracy – Why we need it?

Corrupt politicians are today the rule and not the outrageous exception. Rather than serving the country and the peoples' benefits, they serve their own. Absolutely natural if you ask me, as rarely a person is not blinded and addicted to power when given access to it. The different

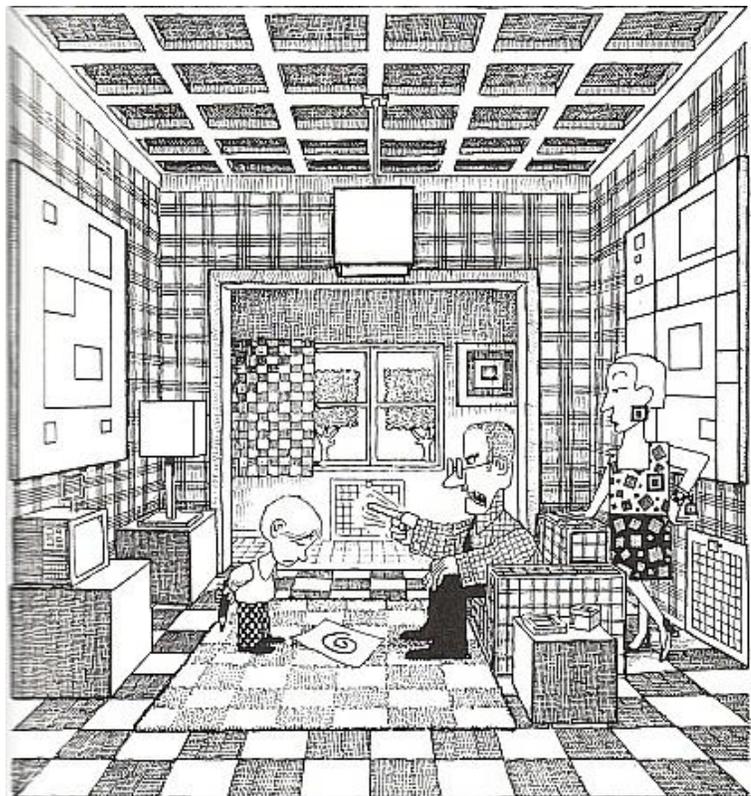
The tyranny of a prince in an oligarchy is not as dangerous to the public welfare as the apathy of a citizen in a democracy.

Charles de Montesquieu

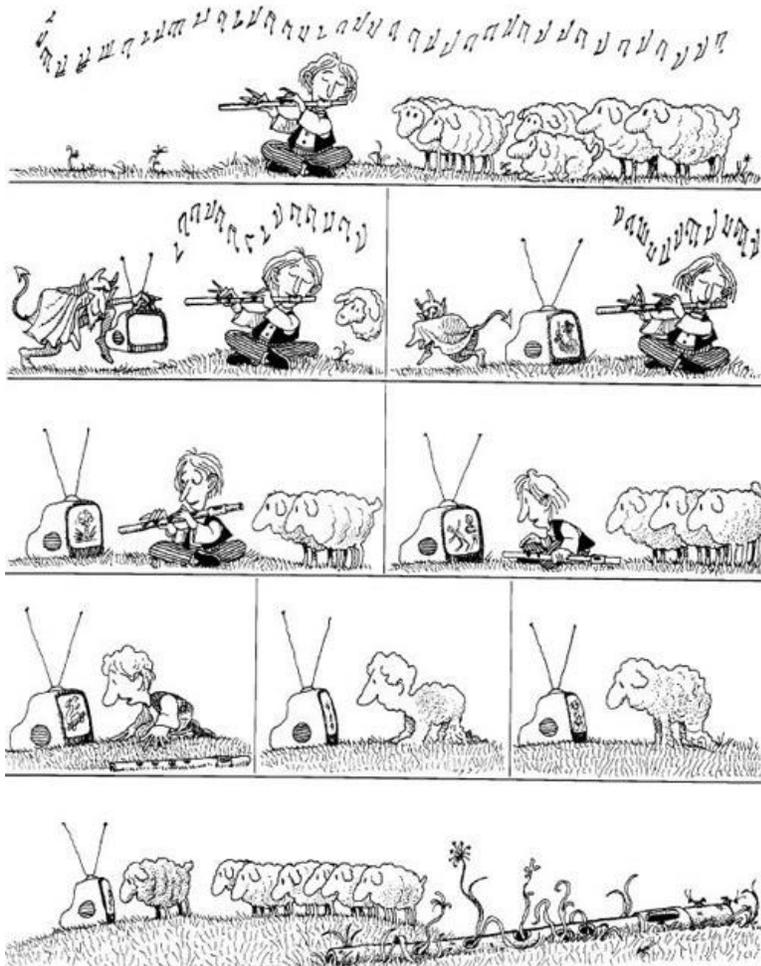
parties that accuse and fight each other in front of cameras, shake hands behind closed doors, as it is a unified effort from their side to maintain the status quo.

A recent example is the Nobel nomination to Obama, denying it from true heroes that deserved it. There's bombing Libya. Now a few US troops go home, but the US will be occupying Afghanistan until 2014 and beyond, and let's not forget Yemen. All this is an effort to keep the representative puppets on the scene by impressing the world to put up with them a bit longer. What has your government done the past 10 years that makes it worth having and paying so expensive for? Why can't young prodigies and intelligent minds release their innovative ideas in a pool of voters to get promoted instantly, but instead we baptize them dreamers of the impossible?

People get fed up by a political party and the unquestioned policies that it forwards, and when they vote another, the same enslaving policies continue to persist. Political parties are funded by the huge corporations that want their benefits to be ensured. So in this Corporatocracy no matter who is elected, citizens are enslaved into an illusion of a democracy. In most of today's countries the amount and the insolence of the manipulation through propaganda, subliminal messages, censorship of media and illegal monitoring is unbelievable. They call terrorists the free thinkers that dare say the truth about the unnecessary horrid situation. Secret services are watching every citizen through phones, computers and cameras. And please do not forget, all that is funded by your tax money.



Having referendums is too costly and inconvenient for both the state and the voters. An online system of paramount security should be developed that handles the voting process of the citizens, as well as providing the possibility of a citizen to be heard and express his opinion or problem. This book provides a blueprint for the creation and implementation of such a system in a modern representative democracy.



Imagine if anyone, anytime could vote for every issue his country faces. Imagine if every one of us could be heard and expressed in every issue. Imagine if he could do it from the comfort of his house, while being exposed in the opinions and information of experts on the subject. This could be our daily reality, and by the end of the book, I hope you will wonder, as do I, why this system is not already the way our society collaborates.

## Direct Democracy through the Ages

Today, with the limitless capabilities of communication provided by the internet, there is really no obstacle to hold us back from having a worldwide direct democracy. Machines can process, in a matter of milliseconds, the bulk of voting data and can provide deeply analyzed information across the globe in virtually no time.

### **Ancient Athens and Rome**

The initial democracy that was born in Ancient Athens, in the 6th century B.C., was a Direct Democracy. Ekklesia was the most central and most definitive institution of the Athenian Democracy. It was the regular gathering of male Athenian citizens to listen to, discuss, and vote on decrees that affected every aspect of Athenian life, both public and private, from financial matters to religious ones, from public festivals to war, from treaties with foreign powers to regulations governing ferry boats.

Roman Republic was mixture of democracy and oligarchy. Roman laws traditionally could only be passed by a vote of the democratic assembly of Roman citizens. Candidates and officials for public positions had to run for election by the people. However the Senate was a formed by an oligarchy.

So why since there was a successful practice of Direct Democracy in antiquity, can't we adopt this system, since our communication powers today are endless by using the internet?

The death of democracy is not likely to be an assassination from ambush. It will be a slow extinction from apathy, indifference, and undernourishment.

Robert M. Hutchins

## Modern Switzerland and the World

The society with the closest resemblance to direct democracy today is Switzerland's half-direct democracy, in which any citizen may challenge any law approved by the parliament or propose a modification of the Constitution. Approximately 4 times a year, voting occurs; these include both referendums, where policies are directly voted on by people, and elections, where officials are elected.

In the last twenty years more than a hundred countries have introduced mechanisms of direct citizen participation within the current framework of representative democracy. Within just a few decades the number of countries across Europe and the world which have some form of direct-democratic process has doubled. The world is moving gradually to direct democracy, and it is our job to assist with every means possible, so we can experience its benefits faster and longer.

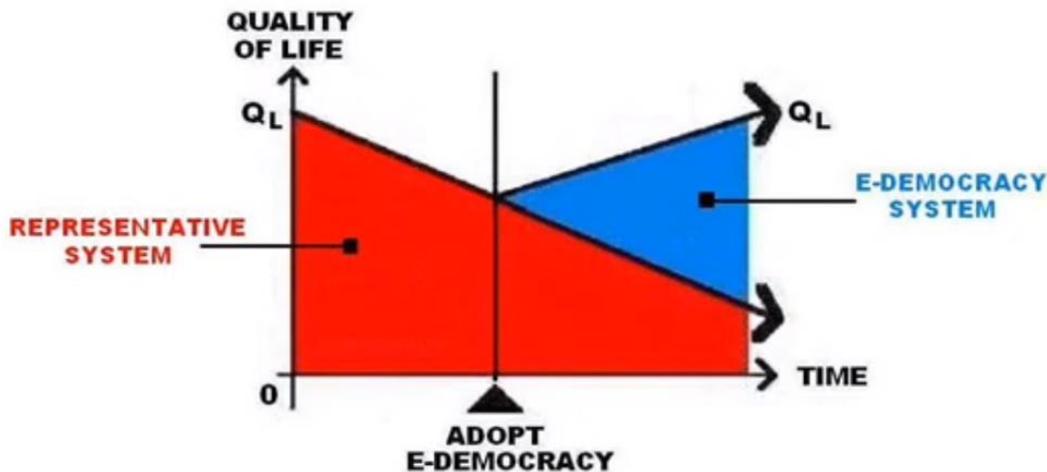
How can we do that? I'm glad you asked.

## E-Democracy

As of now, there hasn't been a true definition of E-Democracy in my opinion. It is my belief that it should be formed as the following:

**E-Democracy is computer network, through which a user connected, has the opportunity to collaborate, participate and interact online with a direct democratic society.**

An online democratic option allows for participation which is specialized for individuals. Their participation can be tailored for them, in that it will be flexible, easily accessed, and available to all, regardless of area or access to resources. This system will aid the social construction of inclusiveness, and optimize participation and sensitivity to individual preferences, life-cycles and efficiency of cooperation.



*A diagram about the improvement of the quality of life after the adoption of an online direct democracy system. As analyzed by architect John Suhr.*

### Can the Public judge wisely?

Democracy is based on public judgment. If the public can judge political candidates, they can also judge issues and take decisions. Additionally, all the advisors and parliament candidates that are being currently representing our democracy will still have the same opportunity to express their ideas and opinions on new or existing issues.

As proven statistically by Francis Galton on the Wisdom of Crowds, the collective judgment of the public can be very precise and wise. Two to three hundred citizens do not have the

To make democracy work, we must be a notion of participants, not simply observers. One who does not vote has no right to complain.

Louis L'Amour

experience or the mental capacity as millions. No one can decide what is best for the population other than the entire population itself.

Representatives are not required for a democracy. This is just a fallacy that the new elite want to defend, in order to render the public unable to react, having appointed them by their own consent.

Representative democracy was needed when remote constituents could not be consulted. With the internet, the public can now decide directly on all major issues. Today, communications are instant, reliable polling methods exist, and computers help to organize the data. The current representative system is outdated, ready to be replaced by true direct democracy.

There cannot be a more appropriate use for the internet apart from e-democracy. Internet is being used for humanity to communicate, exchange opinions, get educated and decide, collectively. Having a global internet infrastructure and still operate under a representative democracy, is similar to having discovered the wheel and still install cubes in cars.

Electronic voting is successfully practiced in Estonia since 2005. The electronic voting system withstood the test of reality and was declared a success by Estonian election officials. Are you still skeptical? Let's overview some of the possible features and benefits of such a system.



Eventually I foresee voting on the Internet, which will lead to much more direct democracy.

Dick Gephardt



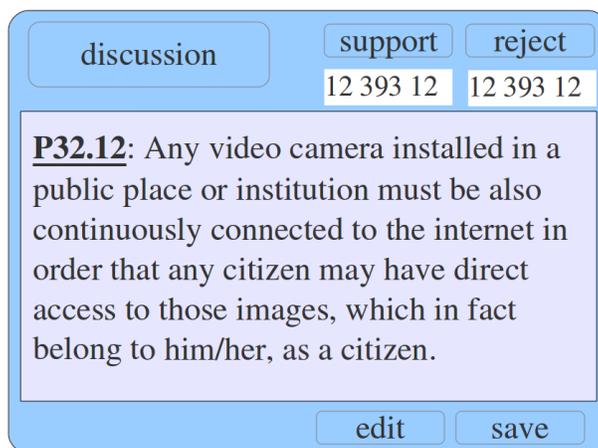
# Features

## A continuous referendum

The legislature of the country would be in a perpetual reform and improvement. Only by continuously moving forward can a democracy be healthy. A dynamic democracy should adapt to the times and stay in tune with the needs of the nation. Thus the citizens would be, on a regular basis, being called online to decide on matters about their country or their community, divided into different zones as explained in a following chapter.

I would recommend for issues of great importance, if their solution is not urgent, then the process of referendum to be carried out once every week for the duration of three weeks, in order to have time for reflection, discussion and broader information from the public.

This delay in the finalization of decisions will also provide the necessary time needed for the thorough examination of the integrity of system's security.



*A sample voting module by J. Manuel Feliz-Teixeira.*

## **A wiki Constitution**

As proposed by J. Manuel Feliz-Teixeira, the constitution, democracy's foundation, would be posted as a wiki website, to be available, editable and discussable. Organized by chapters, sections and subsections, the user would have a word in forming the manuscript that defines his society. Wiki platforms are the richest and most adaptable tool today for detailed distribution of the written word. Voting and discussion available on each section of the constitution would empower this wiki tool to be constantly updated, materializing a new and improved version that could be put into operation on the beginning of each new year.

## **Forums**

Forums would be a domain for discussion, reflection and collective thinking. Citizens would join to announce and report news, discuss and analyze new ideas and solutions, and get informed about issues and upcoming referendums.

Being available anytime offline, those discussion zones would also serve as a pool of knowledge providing answers for questions that have been already solved.

## **Video Database**

A video database similar to YouTube would exist, exclusively for uploading videos with ideas on current issues and opinions. Experts on subjects would publish videos analyzing or simplifying subjects to give the unfamiliar public the proper experience before making a decision, like the

The Internet has brought democracy to so many other things. It's about time the Internet brought democracy *to democracy.*

Joe Green

orators in antiquity. Thus the citizen will be provided with a plethora of information to decide on the issue, and not cast his vote out of the blue.

### **Informative Functions**

The number of tools today for an active willed person to keep up-to-date is virtually endless. Through newsletters, RSS feeds, mobile messaging, micro-blogging services and blogs, information can be shared instantly among citizens to keep them updated. Any idea, opinion, request, report, complaint or generally every human thought can be now flowing into an endless stream of rapid transmission. Users would be able to form connections and join groups as in social media, cultivating collectively their philosophy and path of thought.

### **Discussion events**

A “hangouts” function would be another feature of great importance for the cultivation of the citizens. Through a video platform, the users would create events, in which each citizen connecting online with his microphone and webcam would be able to discuss as in a video conference. This will allow people with same interests and ideas to develop share and improve their thoughts.

Moreover public debates that feature experts or public figures would be held, and the users would connect to stream and watch those discussions. Discussions could range from simple educational subjects, to pre-referendum debates. Everything would be available to the user from the comfort of his house.

Users would be notified to upcoming live events that are important or they have subscribed, or

There can be no daily democracy without daily citizenship.

Ralph Nader

they could watch them later offline, if they are unavailable at the event's duration.

## Leaks

An anonymous system would exist, similar to WikiLeaks, which ensures efforts done to bring the truth to the public do not endanger innocent lives in the process. Anonymity is internet's great asset, providing protection to those in need. Leaked documents and proof of destructive plans against the system would be posted safely online through this platform.

## Open government

The actions of the government should be transparent. The open government doctrine supports the public availability of governmental documents and proceedings so as to enhance public oversight. This step towards less governmental secrecy could be taken now, while still under a representative democracy. Additionally, a financial database is needed, that includes a description of the budgeting process, appropriation information, annual and monthly spending by agency, and types of expenses – including employee salaries.

Likewise, the citizens must partly decide how the national wealth should be distributed. Without the economical knowledge a citizen is likely to misjudge on the distribution of wealth. Thus, experts of economics would present a number of plans for the public, explaining in detail in which sections each policy contributes (e.g. improve of the quality of education) and citizens would then decide which plan they consider most suitable for their lives.

I'm tired of hearing it said that democracy doesn't work. Of course it doesn't work. We are supposed to work it.

Alexander Woollcott

## Official Employees

The unity of the society could not exist without the governmental services, such as a tax payment service. This guide suggests that the parliament and the members elected could be fully replaced by this system. All other services would not be replaced. However they would still be adjusted and modified by the will of the citizens to match the society's needs.

A public database with the profile of each official employee such as policemen, teachers, doctors etc. would exist. This database would act as an evaluation form that would host comments and feedback from citizens. The employees would be hired on a yearly basis with the use of contracts, employing only the best functional ones and replacing those who receive multiple negative feedbacks. Having the most determined and effective employees working for the state would ensure the gears of the society functioning at maximum capacity.

Each of the aforementioned features should be hosted on different web domains and servers for protection against total system failure.



A sample voting module by Australian "Senator Online".

# Usage

The forums and voting section of the system would be divided into zones such as:

- City Level
- County Level
- National Level

Each citizen will participate in the solution of issues only in the zones he belongs, so as to not flood the system with petitions. In addition, citizens whose lives are directly influenced by each issue should decide on the subject, and not citizens outside of its influence.

Citizens that post petitions or discuss issues will be presented with their full name, in order to prevent anonymous threats, spam and abuse of the system. Each citizen will have the right of freedom to express himself according to his will, given than he does not threaten or insult another. However voting will be anonymous and untraceable.

## Administrators

Administrators will be elected and will work voluntarily for the wellbeing of the system. They would sort out topics of discussion in categories, index subjects, create referendums on popular requests, assist citizens, and defend the system from illegal actions. They would be the internal personnel to ensure a smooth operation and an ordered environment for greater efficiency.

It is a crime if a citizen has the right to and does not take part in the politics of his country

Solon

## Penalties

Citizens, who ignore the referendums, do not use the system for an extended period of time (e.g. two years) or perform illegal actions, could have penalties imposed on them. Penalties will range from having to pay partially for otherwise free benefits (health services, tax reductions, paper services) to voluntary work in the occasion someone is against the use of the system. Ensuring that the majority of the population actively participates in the system, quality of life, literacy, civility, humanity, justice and mental health would keep being propelled by the national cooperation.

## Security

The biggest risk of such a system would be its security. There is no doubt that computer hackers will try to gain access to this system and alter voting results, silence some citizens, or try to bring down the whole network. However as Kevin Curran and Eric Nichols of the Internet Technologies Research Group noted in 2005 “a secure internet voting system is theoretically possible”, although with great effort and programming expertise. Here are some points that will make the infringement of the system, if not impossible, extremely hard, and easily traceable,

I would create an electronic town hall where, say, every week or so we would take a single major issue to the people. We would explain it in great detail and then we would get a response from the owners of the country — the people — that could be analyzed by congressional district so that the Congress — no if's, and's and but's — would know what the people want. Then the boys running around with briefcases representing special interests would be de-horned — to use a Texas term.

Ross Perot

reversible and fixable. Here are some points that can be initially taken.

### **Authentication System**

Banks have used systems to ensure the safety of online transactions. Millions of users use e-banking systems to process their wealth daily. With highly encrypted connections and exceptionally trained software developers, banks have formed durable systems that can defend against and reverse potential hacking damage. An authentication system, similar to the one banks use, will ensure an exceptional level of security.

Additionally, live network analysis by security experts would not only reinforce the fortification of the system but it would effectively contribute in tracking down attackers.

### **Tokens**

A citizen would pass through layers of security. A Token is a physical item that displays a code when requested, that must be inputted in a short time span from the initial request. The algorithm is unique in each token, producing a different code for each citizen, and unique codes every time it is used. This function ensures the physical presence of the token when used by the system. Upon losing it, the citizen can declare it and freeze entrance to his account just by making a phone call or sending a text message to the security service, reversing all unauthorized actions done while lost.

### **Fingerprint Authentication**

Similar to tokens, a fingerprint authentication system could ensure the physical presence of the

All that is necessary for the triumph of evil is that good men do nothing.

Edmund Burke

holder of the account. The physical presence may not always mean exclusive use, but in such a case, it will be only one vote misused, and not a wide account hacking attempt.

### **On-screen keyboard**

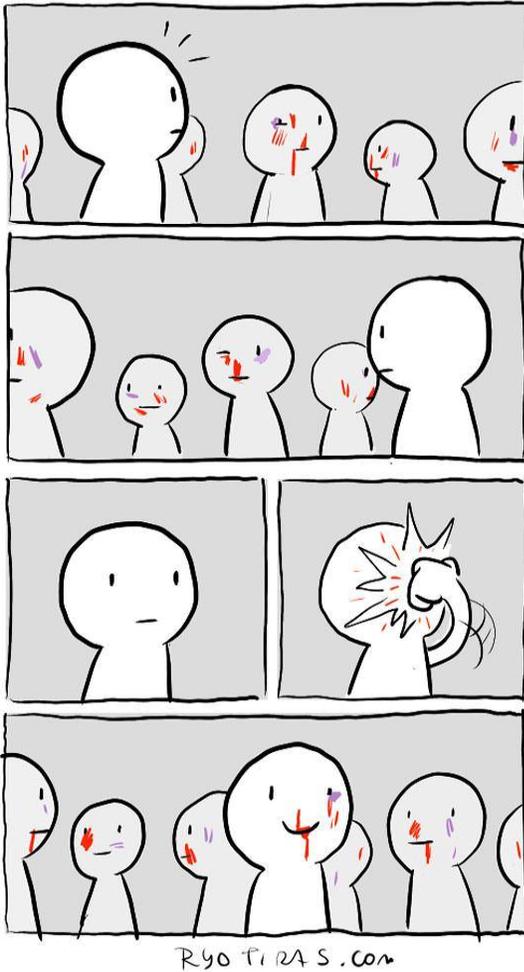
On-screen keyboard is a function that requires the user to input a password additional to a login password that is managed by an on-screen numeric keyboard clicking on the numbers. This function prevents login information theft from keylogger software.

### **Safe mode**

To provide protection from malware and viruses that can impose an identity theft risk while operating on the system, there would be a “safe mode” function, that would freeze all other tasks and operations other than the system itself and the digitally signed operating system functions. This would significantly increase the security level of the system, as proper design of such function would make the security infringement from malicious software almost impossible.

Democracy is not something you put away for ten years, and then in the 11th year you wake up and start practicing again. We have to begin to learn to rule ourselves again.

Chinua Achebe



Daily updates of the system would take function. Moreover, after a period of idleness the system would log out automatically to ensure that later non-authorized usage by someone other than the user would not follow.

### **Feedback system**

An electronic voting system, is much more reliable than thousands of people manually counting the votes. There is always a percentage of error in the results of elections and voting caused by the human factor.

For ensuring that voting results have not been manipulated by hackers, a second or third feedback system can be used. This system will be used on different servers and security

None are more hopelessly enslaved than those who falsely believe they are free

Johann Wolfgang von Goethe

protocols for the citizen to revote and compare the results. If there is a statistically significant difference between the two systems, a team will review the server and inspect the possibility of a security breach. The feedback voting system would take place in broad referendums where security is of paramount importance.

Another feedback engine will be the report of users. A side service that will deal with citizen support will deal with system malfunctions or citizen feedback. In that manner, if a user's video gets shut down by a potential hacking attempt, that user will immediately report this incident into the service which in turn would investigate what went wrong.

### **Financial Support**

The capital that was used in paying thousands of massive wages monthly from parliament members, parliament staff and advisors, and costs saved from elections and other parliamentary activities, if used on updating the systems security, would ensure the creation and maintain of a topnotch security defense against attackers. Teams of developers and experts would participate daily in improving the system and tracking system logs, to trace possible violations.

### **Hactivism**

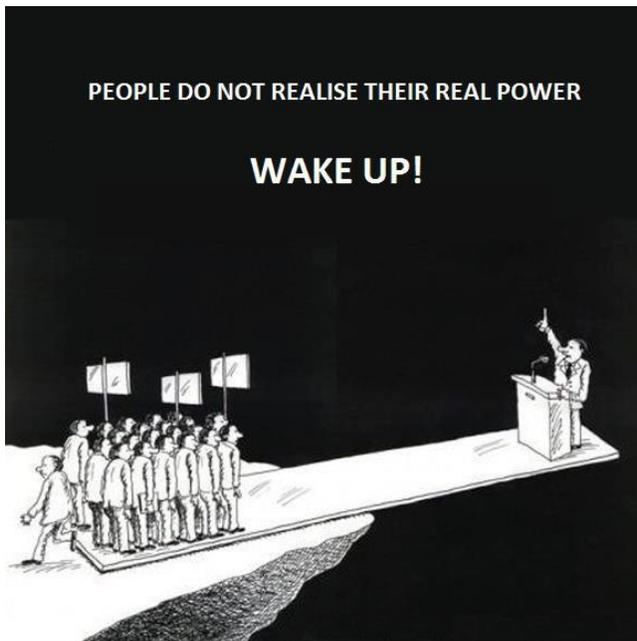
Hactivism is hacking activities which produce results similar to those of conventional acts of protest, activism, and civil disobedience. It is used to promote political ends, uncensored free speech, human rights, and information ethics. The emergence of hacking groups such as the "Anonymous" is an active display of discontent. Our society operating on a platform such as this would mean that most of the Hactivist groups would promote the defense and the wellbeing of the system against damaging hacking attempts. In other words, ethical hackers would help instead of protest and sabotage.

# Implementation

A system like this, which radically changes the consistency of a society, could not be implemented immediately. Time and effort will be required from everyone. Below are some realistic steps that could be taken within our current reality.

## Awareness Website

Initially a website could be created, that allows the citizens to express their opinion in different legislatures that are being voted from the parliament as well as different national issues. A team of administrators would publish, in article forms, a short resume of the different legislatures currently being voted by the government with a poll and comment section. Afterwards people would decide on the subject, comparing them to the actual decision of the parliament.



Within the website, the constitution of the country could be converted into a fully editable wiki right now, where users will start editing and discussing the current constitution. After a period of months and a number of edits, a new and improved constitution would emerge.

This website would be promoted by the use of social media, one of the most effective means of promotion in our time. Users that vote on a subject would share the article to the public and invite their acquaintances to participate. Such a website if designed and updated properly and

on a regular basis, would increase in popularity, in such degree, that users would use it regularly to get informed about the actions of the parliament as well as to express their will on the forums.

This would drive the media and the press to start magnifying the website's popularity, slowly rendering the website as a valid extension of public opinion. Legislators and members of the parliament would be held accountable of not respecting the will of the people published on this website.

People, taking radical steps to form and design their own life, would be transcended into a new dimension of symbiosis and coexistence. There will be an exponential growth in literacy and awareness as the feeling of responsibility will urge the citizens to be active and participative. Continuity of this practice would provide the necessary readiness of the population in order to transit to an E-Democracy, voted and exercised directly by them.

### **Participatory Democracy**

The easiest and most applicable step into integrating E-democracy into our society today is Participatory Democracy.

There are a number of parties that allow users to participate and impose their voting directly to the party's decisions. Such examples are the "Online Party of Canada", Sweden's "Aktiv Demokrati" or Australia's "Senator On-Line" and the "Pirate Parties" that emerged in numerous countries. Those parties, when elected in the parliament, offer the opportunity for the public to

Sometimes I think that a parody of democracy could be more dangerous than a blatant dictatorship, because that gives people an opportunity to avoid doing anything about it.

Aung San Suu Kyi

vote directly on legislations taking place in the parliament. On the party's website, polls are created when the party is called to vote on legislations. Registered citizens log in and vote on the website. Afterwards the party members in the parliament vote according to the majority's decision. Any officials that do not vote according to the majority are asked to resign. With the emergence of those parties people would be able to see that a transition to a Direct and Online system is needed and would start taking radical steps to its foundation.

### **Learning Centers**

All those actions and moreover the whole entity of the system itself, requires a certain level of computer literacy. However we need also plan and take actions to aid the people unfamiliar with the usage of computers to use and benefit from the system.

Computer illiterate would be helped by the establishments of learning centers. Learning centers would be a facility with access to the system, and experienced personnel to assist the citizens, and educate them on it. People who are old, computer illiterate or simply those who do not own a computer, would be able to use the system as everyone else.

Furthermore, as this new system is instilled deeper into the society, numerous citizens will emerge taking the role of mentors for the youth by providing simpler explanation of complex legislations and guides for the usage of the system.

Remember one thing about democracy. We can have anything we want and at the same time, we always end up with exactly what we deserve.

Edward Albee

## What can I do?

- **STOP** supporting political parties. All our issues are solved and all our legislations are created by political advisors that counsel the members of the parliament. All a party does, after winning the elections, is to start forwarding policies to ensure its domination in the future and gain access to the country's wealth.
- Educate yourself further about the different attempts being done to promote Direct Democracy. Research about political groups or parties trying to aid the forming of an E-Democracy in your country. If there is none, consider making one.
- Be aware of parties like the Online Party of Canada or similar projects and support them as much as you can.
- Share this free book.

*Someone once said that happiness is measured by the amount of control you have in the things that compose your life.*

This is the fastest, most effective and realistic way to get rid of corruption, manipulation and inhumanity. What I'm suggesting here, is not something perfect, but something much better than what we already have. There cannot be a perfect system, as perfection means that there is no room for further improvement, whilst this system will be ever-evolving. It is not only feasible, it's necessary. It is clearly your choice to assist or to ignore. Let's stop voting for the deceitful ones who define our lives, and let us start voting **for our lives**. Our Actions can save our countries and transform our lives. Nothing can hold us back anymore. We can be free. **Act.**

“At first people refuse to believe that a strange new thing can be done, then they begin to hope it can be done, then they see it can be done, then it is done and the entire world wonders why it was not done centuries ago.”

Frances Hodgson Burnett