Herb Stephens: "We will move from a world of polling to a world of always on voting"

"Our goal at Democracy Earth is to take that corruption out of elections and take the corruption out of public ledgers. We move from a world where whoever controls the database, can and often does win the election. We are in a world today where less than 50 pct. of the world is living in a true democracy. These places where you are not living in a democracy it is usually a corrupt regime or group that controls those elections. At Democracy Earth we are trying to move out of the corruptible worlds of elections to one where it is not corrupt. Blockchains are at the very heart of that"

Interview with Herb Stephens, co-founder of Democracy Earth

Interview by Mark Sinclair Fleeton

RÆSON: How would you define blockchain from the perspective of your work with the technology?
STEPHENS: For me, blockchains are a real evolutionary as well as revolutionary movement within technology. Databases these days are essentially updatable and deletable. We are moving from a world where databases are corruptible to a world where databases are incorruptible and that is one of the defining elements of blockchains for me. For the most part a blockchain is much like any database or even spreadsheet. You can get pretty complicated in all the different technology, in the cryptography and everything behind it but at the end of the day, we are just talking about. A blockchain is a database that, rather than being centralized and therefore corruptible, is distributed, and therefore the ultimate value to society is their incorruptible nature. In that we are moving from a world of balance sheets to more of an income statement or dynamic world. The internet today is sort of a snapshot in time - you request a file and come back. If that source changes or deletes the link, you can no longer rely on that source. What companies like Filecoin (Filecoin is a decentralized information storage solution and cryptocurrency, ed.) and IPFS (IPFS is a distributed and peer-to-peer-based protocol for sharing and storing hypermedia, much like the world wide web and HTPS (hypertext transfer protocol), ed.) are trying to solve, is what they consider to be a broken internet. The fact is that all these different endpoints can change and therefore disrupt the continuity of the internet. We are moving to a world, where there is no update and delete. It is just a constantly changing internet, but you can always go back and see the history.

I also describe it like a capitalization table (or Cap table. A spreadsheet or table that describes capitalization of a company's history. This can be equity shares, preferred shares, options and so on, ed.) A blockchain can and does and will represent organization. If you think of a public organization that has stock, there is x number of shares. Over time those shares are distributed to various individuals and entities. In the same way blockchains are capitalization tables. I think there is going to be a tremendous amount of applications when these cap. tables, that are essentially now traded in public markets, are no longer traded in these public markets and all entities migrate to blockchains. Current markets become redundant, including every stock exchange in existence today: NYSE, Nasdaq, every exchange market, including all stock and currency exchanges.

RÆSON: Can you be a bit more specific as to the distributed part. Why is it so important, why it makes the world so dynamic and why it enhances security?
STEPHENS: It is the simplicity of the security and architecture. Today, if you are going to corrupt a database or breach the security, oftentimes there is just one point. You just need that one set of password and keys and then you update or delete the record. With blockchains, every single person has a copy that is distributed across the world. By nature, in order to corrupt that particular database, you would have to change every single one of them, which would be next to impossible. It is not that you are muscling security, it is just that everyone has a copy. That simplicity is the hardest to break.

RÆSON: What is the vision behind Democracy Earth?
STEPHENS: Probably one of the more important things that we do in society is vote and decide our leaders and then once those leaders are decided, spend public money. We are in a world today, where less than 50 pct. of the world's population is living in a true democracy. These places, where you are not living in a democracy, are usually governed bt a corrupt regime or group that controls those elections. Our goal is to take that corruption out of those elections and take the corruption out of those public ledgers. We move from a world where whoever controls the database, can and often does win the election. At Democracy Earth we are trying to move out of the corruptible worlds of elections to one where it is not corrupt. Blockchains are at the very heart of that. We start with decision making at the public level, but then there is a tremendous market and opportunity to take this same decision-making tool, that we use in public elections and bring that inside to corporations. Usually when you're talking about a public election or even decisions within a corporation - one of the things we are talking about is capturing the value of these decisions and accrue that value to the individual. Right now, we conduct a vote as a society and the value of that vote dissipates. When we know a result and then we move on. With blockchains, and the way we are architecting it, we are going to enable what we call "always-on-voting". You can move your token - if you will - from one choice to another choice and it is always sitting there. Elections become a deadline rather than an event. It is going to be of tremendous value to society because it will be signalling what people want. We will move from a world of polling to a world of always voting. Having the value of that vote - the keys to that vote - with the individual rather than with a jurisdiction or a government.

RÆSON: That begs the question: what is your vision for democracy?
STEPHENS: We are not pushing a particular flavour of democracy. One of the types of democracies that we talk about a lot is "liquid democracy". I would argue that we have liquid democracy today. It is just frozen. We are giving the vote to someone else whom is then going on to represent us. In the future, we see that these jurisdictions can have the option to be a little more fluid in their democracy. They can take the vote back, they can give it to somebody else and if the representatives do nothing, then representation can kick in. We see opportunities for what I would call 100 pct. participation in elections. Voted directly or you can delegate to someone else, that is more active or more of an expert. If you don't do that it falls back on what I would call the real form of representation. Those representing those, that don't participate directly - are unwilling or unable - then representation kicks in and you can have 100 pct. representation in that form. Those are the types of democracies, that we are pushing. Those We are pushing for types of democracies that are a little more dynamic, a little more people-centric. At the end of the day, it is really the corruption that we are trying to get rid of. We are always going to have one person-one vote for the foreseeable future. But there is a lot of places in the world where the government has broken down and the people wants and needs solutions delivered right to their mobile phones. That is another aspect of blockchains and our technology. It is definitely for the younger generation and definitely for those operating with mobile phones.

RÆSON: I was talking to an economist who said that cryptocurrencies like Bitcoin is really only a realistic alternative, at this point in time, in countries where they don't have a functioning monetary infrastructure. Are you saying that blockchain can only be an alternative technology in countries where democracies aren't really working?
STEPHENS: I am convinced that eventually, all currencies and all voting will be done on blockchains. Most immediately, the biggest demand is in places that don't have functioning government and democracies. For example, our co-founders are from Argentina. There they have lived through real currency issues, real value loss and real family net worth loss. Real issues that impact people in a meaningful way, that we are not oblivious to, but we don't live through in America or other developed countries. There it is a matter of survival, of zero trust in your government or currency. Bitcoin and other cryptocurrencies are ideal for situations like that. But I would also argue that they are ideal for places that have fiat currencies today.

RÆSON: How do you propose to realize your vision at Democracy Earth?
STEPHENS: The industry as a whole is still in its infancy. I think it is going to be adopted in a couple of ways. One is what I would call "top-down jurisdictional voting". That is where a country is conducting a nationwide referendum or election and they want a more secure, mobile, and cheaper way of conducting that election. We have a number of countries that are reaching out to us and asking us to help with that. Another area is the "bottom-up-democracy", Where you are going to gather something like Occupy Wall Street. You have a demand, you have a group of people, they have there their certain issues and they were a group of people are taking it up the chain of democracy. I would say that a lot of that bottom-up-democracy is broken today. It is just about who is the loudest voice in the room, and who has the most money. Whereas if you have inexpensive, mobile based, blockchain, open source- methods, which people can gather, discuss and put on public blockchains, then you can walk into those public meetings and you have data that you can point to. It is that much harder to ignore. So as organizations are formed, liquid democracy is built into those organizations. Anyone who is a shareholder or has a say will be able to participate through these different organizations and not just through bottom-up or top-down democracy. The 1st Amendment of the U.S. Constitution protects free speech and press - everyone is aware of these rights. The Amendment goes on to protect "the right of the people peaceably to assemble, and to petition the government for a redress of grievances" - these rights are not only less known but also under siege around the world. Governments have more and more taken an active role in suppressing the gathering of citizens. The technology the Democracy Earth Foundation is building directly supports these 1st Amendment rights. "To assemble" we support online via electronic organization. "To petition" we support through citizen-driven voting. We argue that everything we do should be outside the control and regulation of any government ...and I predict that we will eventually need to defend these rights at the U.S. Supreme Court.

RÆSON: Can you talk about some of the actual projects that you have worked on?
STEPHENS: We worked on the Colombian peace referendum. Basically, there were three sides to that: The FARC, the existing government of Colombia and the ex-government. The issue was peace or no peace, and we were contacted by all three sides. During the fifty plus years of war over six and half million Colombians have left the country. They are not able to vote locally, and the country is very concerned about getting their vote. We managed that aspect of the referendum over the internet with them. Also reaching out to the 14-18-year-olds, who is not registered to vote yet, but because of what happened at BREXIT, they were very concerned with what the younger population felt relative to peace, and how they would vote. We were able to conduct this vote with them over the internet. They send our ballots out to the expats as well as the younger generation, and then we were able to segment that vote in a lot of ways that you can't in a physical ballot, which was just yes or no.

It was a good election for us to conduct. It was great data that was fed back into the system and was eventually used to turn that no into a yes. That was a great example of us working with the technology. Another one we worked on was the Hong Kong elections for Chief Executive (March 2017, ed.). There it was more of a shadow election, that a major group wanted to conduct. Right now, we are also working with a lot of activists in Venezuela. They have just their presidential election, where the turnout was extremely low, because they had no confidence in the election. We are working with a lot of the non-government folks there, that are trying to put in secure elections outside the government. It is places like this that we have received a lot of requests from, as you can imagine. Nicaragua is another state that we are working with actively right now.

RÆSON: You are in Norway right now, and they are looking into implementing this technology. What are their ideas and thoughts about this?

STEPHENS: We have seen the Scandinavian countries to be among the more advanced in the world. Estonia has been using electronic voting for a long time, and they have digital global citizens IDs. In Norway, we are working with consumer affairs groups that interact the most with citizens by researching the population's opinions relative to consumer goods. They want feedback, and they want it in open databases that the public can analyse and see. It is not just public elections, but taking databases, public comments, and opinions and putting them out there in a way that is accessible and can be analysed by the public. That is what we are seeing here: A more open society. I am also attending the 10th annual Oslo Freedom Forum and working very closely with The Human Rights Foundation, the organizing body of OFF. Norway has been very supportive of these very important gatherings and initiatives.

RÆSON: How do you think your work and technology will help improve democratic participation?
STEPHENS: I am not a believer, that more and more people will directly participate. They will in certain areas and places, but it is not a premise of ours to implement liquid democracy and everyone will be directly voting and allocating their vote. I think the key is that they have that ability to pull that vote back or signal whether they do that or not. Relative to participation, I think, it is going to dramatically improve democracies, because it is going to be more mobile and more in line with what the younger generation is familiar with. They grew up on smartphones, and that is where you are going to see participation increase. When you can just pick up your phone and vote rather than take time out of work, go to a polling station - one particular physical location. Borders and the way populations - whether they want to or not - have been moving outside of their borders. Take Syria for example, where so many have left the country. Being able to reach them, and not making them physically show up at a polling station, is going to be a tremendous increase to participation in democracy. I think that just the trust-level is going to increase participation. If you trust that the databases are incorruptible out there in the public sphere, and a lot of people are analysing it - whether you are doing it or not - then the confidence level is going to increase and therefore participation is going to increase.

RÆSON: In the future everything is going to be on blockchains. Can you explain that?
STEPHENS: Every time your finger or thump is hitting the screen of your smartphone or iPad, it is hitting databases. Every single time - from a technology standpoint - that is a vote. From a technology standpoint you have twenty choices on that screen and you choose that one. Then you have ten other choices and you choose that one. Those are votes in of themselves. You don't think about that every time you hit the screen, that it is a database you are using. Just like in a few years, you are not going to be thinking about that it is blockchain, that you are using. Because it really is just another kind of database, that you are using. A more public one.

RÆSON: What kind of timeframe are we talking about?
STEPHENS: I will say, that the industry has moved a lot faster than I thought even just a year ago. We are seeing an explosion and enthusiasm, that is going to be at a faster and fast pace of adoption. I see most organizations in the world being registered on blockchains within the next ten years. I also see most fiat currencies that exists today either being reissued by those countries as a cryptocurrency or replaced by coming cryptocurrencies. Also, within the next ten years. I know that, as societies go, that is a short timeframe, but the ability to adopt blockchains is accelerating as well. To replace an existing, one is really quite simple. These days - different currencies, different credit cards - everything is digitized, so it is just a symbol. The dollar sign is just a symbol connected to a ledger. It can be replaced as fast as hitting a button. The adoption can happen rapidly, and I think we have seen this with the rise of these cryptocurrencies. The truth is, that people are just tired and frustrated with these central governments and their incompetency when it comes to managing currencies. And I must say, that it is difficult for them. The US dollar is a bully in the world and these other currencies are going up against the dollar, being pegged to the dollar and always being in the shadow of the dollar. They have a hard time competing and reconciling their national accounts and

currencies relative to it. I think we are going to see accelerated adoption just for those reasons. My cofounder came to the United States with all of his net worth in Bitcoins. There is a reason for that. He and his family lived through the horrendous currency of Argentina. The demand is there and ready to mobilize. The sceptics think it is going to be longer. I think, that may have been true, but with how fast the adoption can occur, I think it is going to be accelerated.

RÆSON: What do you think the social impact of blockchain technology will be?
STEPHENS: I think that in itself it is a social impact, and the first wave of blockchain adoption is pretty much for social good. If you think about currency, that is just the ability for all of us as a society to trade securely and also to store value securely. Today, most of our data and assets are in the hands of third parties. This whole move with blockchain - from centralization to decentralization - means that rather than the keys to all these assets, votes and data being with these third parties, and also being under their monetization, we are moving towards a world where the keys are with the individuals. Monetization is going to accrue to the individual and most of the benefits to society will accrue to the individual rather than to these institutions or organizations. I think that is going to be the biggest impact on society.

Herb Stephens (b. 1965) is a co-founder and treasurer of Democracy Earth Foundation. Democracy Earth works with implementing the blockchain technology in connection with elections and other democratic and civil society functions for greater transparency of and accessibility to these processes. Stephens has a BA in Financial Administration and has attended the Financial Management Program at the General Electric Corporation – an equivalent of an MBA.