#### Shane Greenstein:

This is Professor Shane Greenstein with the HBS Digital Initiative. From the 2019 Future Assembly at Harvard Business School, we are pleased to present Flash Talks, exploring technology in a multidisciplinary world.

## Lesly Goh:

In the world that I live in, the World Bank Group, the problem that we're trying to solve are tough, but with the growth mindset and the ability to tap on the human ingenuity, we could address some of the impossible to make it possible. So what I'm going to talk about, it's not about Bitcoin, it's about Blockchain for social impact. Because this used to be a topic where grandmother will call me up and say, "How can I invest in Bitcoin?" I said, "No, that's not my business." So what I do at the World Bank Group is use technology, especially in the frontier and disruptive technology, to make a difference in people's lives. At World Bank Group, we have two key mission. Ending extreme poverty and increasing share prosperity around the world. By doing so, we tap upon some of the great minds. Now as a CTO, it's very strange for me to say that it is not all about the technology.

### Lesly Goh:

As I quoted my colleague who talk about that technology is not the only means to solve the problem. It needs governance, legal framework, enabling environment, and the right circumstances and context to deliver a fitful purpose solution. For that, I want to bring your attention to what other possibilities where Blockchain is not about just cryptocurrency or Bitcoin or speculation it's about making a difference in people's life. Fundamentally that two key scenarios that most Blockchain scenario boils down to, I know there are a lot that I put out there, and that's a great paper from Stanford that talks about social impact with Blockchain. But those two key scenarios are one, provenance, tracking the identity and the source of something. And usually that something could be traced back to the origin such as organic food products, such as the source of expensive commodity, or digital identity of refugees where identities hard to come by.

# Lesly Goh:

The other one is exchange of value where there is something that goes from one party to another, whether it's monetary value or something of a value to the receiving end. So it could be a financial value to refugees who are displaced in different parts of the world. Or government to citizens who are on welfare program. So there are multitude of examples that are highlighted here now. I've worked in quite a few of them. Now, the ones that are interesting I want to also bring to your attention is again from Stanford paper on Blockchain for social impact.

## Lesly Goh:

These are some of the areas where there have been cases on an adoption of Blockchain for social impact. And it varies in cycles in maturity and adoption. But fundamentally there has been a lot of talk about using Blockchain, and I wanted a quote, the Prime Minister Modi who went to Singapore last year in the Fintech festival, he said, "If you want to get the venture capital to invest in a startup, just say you're doing a platform, you get about 10 to 20%. if you want to get more percentage out of them. You say that you're doing financial inclusion, but if you want them to empty their pocket, you say you're doing Blockchain."

# Lesly Goh:

And to some extent it's true. But I hope that that is not really the case for most of you who are really using Blockchain to solve some of the world's toughest problem. So I want to point you to this paper that talks about Blockchain beyond the hype and highlight some of the key questions to ask, to fundamentally question why you're using Blockchain. There are a few characteristic of Blockchain for those who may not know about this. Decentralized, secure, cryptographic hash and also immutable. Those are the key characteristic of why you would use a Blockchain compared to a conventional database. So if you really ask and look at the problem holistically, you will decide with a process of elimination, and also by looking at the criteria of why you would choose Blockchain.

# Lesly Goh:

Because it's not just a fancy product, a solution, it needs to solve a problem. So I'll bring you to a few examples. At the World Bank Group, we focus on driving solutions from capital raising, in the capital market for bond issuance. In the last 70 plus years, we have been focusing on lending and providing financial help to the world's most needed places in the developing countries. And for that, our treasurer and vice president wanted to try out disruptive technology with Blockchain to issue our first bond on Blockchain, August 23rd, 2018 last year and we raised 110 million Australian dollars with institutional investors. This is a bold step to accomplish what we call leading by example. We wanted to show the world what it is like to take on new technology, learn from it, iterate and address some of the toughest challenges in the world. Because there's so few projects that are in production.

### Lesly Goh:

So some folks may ask could you not use the tradition database? The answer is yes, but in order to make a stand, to lead by example, to also plan for the future phases of what potential ways that Blockchain can solve the development challenges, we wanted to moat make that statement clear. And when I was in Asia, I was stationed there for three years in my prior roles, I cover a lot of the financial service institution, capital markets, and regulators. I work with monetary authority of Singapore. Singapore was my birth country, so I had the opportunity to work with the regulators and address one of the key challenges of real realtime growth sediments. And Project Ubin was the project to showcase what it is like to try out different protocol Etherium, [Quarter 00:07:13] and also the last one is Hyperledger and the white paper was written by Accenture to showcase what it is like to put all of that and experiment at in cloud on Azure technology.

# Lesly Goh:

Now with all of that in place, what does the future holds for Blockchain technology? In the case of financial institution, there could be a possibility of using Blockchain for central bank issued digital currency. You might say, "What in the world is that?" Well, it is basically some of the central banks who are looking into experimenting with digital currency where cash is no longer relevant to them or may be too expensive. Cambodia Central Bank is publicly announcing in this summer to launch a first ever. In some countries like Sweden where cash is not frequently used, they are also experimenting with that. In countries like Venezuela where inflation rate is high, that's a good example of potentially leveraging Blockchain technology for digital assets. There are many more out there that could potentially tap upon a form of tokenized economy. And this is where I'm very excited about, because this is where the potential ways of digitizing land rights or land title to use that and empower small medium enterprises to get better credit to collateralize their crop yield or the land rights in order to get better financing or better insurance.

## Lesly Goh:

This is what is called empowering people who are the base of the pyramid. Where 1.7 billion people in the world are unbanked and under banked. And we live in the world where we don't have to worry about getting a bank account, but in the remote villages, far, far away in Myanmar, that may not be the case. Imagine empowering the woman's social enterprises to gain access to financial and give them access to the digital economy. The potential is immense. That's the reason why I'm so excited about the use of technology, such as Blockchain, to make a statement that we can solve some of the world's toughest problem with disruptive technology. Imagine combining that with artificial intelligence. The potential is immense. And [inaudible 00:09:46] of things, IOT sensor for the small, medium enterprise farmers so that they have better control over their crop yield. So let's bring a hearts and minds together and join force in the community to bring some of the best solution to bear so that we can help solve some of the world's toughest problem together. Thank you so much.