Blockchain: A non-technical presentation for the rest of us!
Enbridge Research in Action Seminar Series

Written by: David Mason, Haskayne School of Business MBA Candidate 2019

With his consent, MBA student David Mason transcribed his interview with ERIA seminar speaker, Dan Giurescu. Some wording has been modified, not to change the content, but rather for clarity in written form.

David Mason: Tell me a bit about yourself and how you got into this industry?

Dan Giurescu: I went to York University in Toronto, it was the first ever program offered for computer Science in business. I started my first tech company when I was in university, which I exited after university. I then had two unsuccessful startups which I learned a lot of great lessons from that I would apply for the rest of my life. I later moved to Calgary where I started my next startup. We were later acquired by a large oil and gas company. After that I started a company focusing on the movement of dangerous goods. There we created one of the first 'smart contracts'. It gave the opportunity for each user to only perform only the jobs that they were allowed to do, based on their role and the manifests point in action.

David Mason: What is blockchain and why is it so revolutionary?

Dan Giurescu: The way we like to define blockchain is that it's an online repository of who owns what and when. It creates a new model of trust and transparency that allows multiple parties to work off a distributed data base and it becomes, in a way, non-intrusive to already existing organizations data base models and firewall penetrations. What this means is that — imagine having a common place where we work into and have our systems updated afterwards. So, none of us really have to API into each other by that definition. To me, blockchain is also an enforced workflow management tool. It allows for you and I to agree on how we want to perform the business transaction and once we encode that into the blockchain smart contract it now allows us to go forward and say, 'did you perform your part of the job?'. It really creates a new trust model in way that everyone can agree on.

David Mason: So, it sounds as though it's a great way to reduce administration in a business?

Dan Giurescu: It's a beautiful way to reduce administration! There are many ways blockchain can be used to reduce administration costs such as in the procure-to-pay space and use of one-touch invoices. Reductions in administration times for invoices are beneficial to everyone as it helps a business make payroll faster. This helps businesses form better working relationships between each other.

David Mason: What are some of the most common misunderstandings about blockchain?

Dan Giurescu: One of the biggest misunderstandings is that it is cryptocurrency. Often when we're asked to explain to companies what blockchain is we'll get comments from companies like, 'I don't want to pay my vendors in Bitcoin'. That is definitely one of the biggest misconceptions that Bitcoin and blockchain are the same thing. The second biggest misconception is that the blockchain technology is hackable. We work with some very senior cryptographers that contract with very well-known organizations, and the blockchain technology has never been hacked. There are ways to prove that it has never been hacked. The third biggest misconception is that there is no double spend in blockchain. You can double spend in blockchain. It's not very common but it can be done. By double spend I mean, for example, a company may have their goods in stock and show you that they have it but may have simultaneously promised those goods to someone else.

David Mason: What sort of applications are there for the cannabis and healthcare sectors for blockchain?

Dan Giurescu: The two most typical applications that you hear about in the cannabis space is the 'seed to smoke'. This is all about the traceability of the original bud and female bud and how many ways it's been treated and what its output is after all the modifications that it had. That component is showcased a lot in the cannabis industry. In the medical industry we're seeing a lot of health record applications and maintenance of your own health records and the individual person actually being the owner of that health record. I was born and raised in Romania. When I would go to the doctor in Romania, whether it's a dentist or family physician, I would be allowed to retrieve those records myself and walk away with them. But in places like Canada and the United States you are not allowed to do that. So even though you've paid for a service they retain your record and you have to go through a massive fight in order to retrieve that record just to send it to another doctor or have it to give to another doctor for a second opinion. Often seven different people will touch that record before it makes it into your hands. When you look at the high cost of health care, this is a major component because all these different individual middlemen have introduced themselves as a value add when they're often not really needed. If you have the freedom of owning your own information you should be able to walk into a doctor's office, get your record, put it in your backpack and walk away and take it wherever you want. When you think about all the phone calls and emails they have to respond to, that's also an overhead charge in the health care system. We have to ask ourselves if this in an efficient way of managing that process. Those phone calls and emails didn't need to exist because it could've been a direct request to the system itself with an encrypted model that a blockchain would allow and those costs would never need to be incurred.

David Mason: When you see press releases come out about cannabis companies getting involved in blockchain, are they legitimate or are many of them just using the words "blockchain" in order to get some hype and attention to their companies?

Dan Giurescu: I definitely think that some may be playing the hype model. You get to see often enough when you start reading their reasoning for why they're applying blockchain. Blockchain is not for everything. Today at its maturity stage you can still perform 70%-80% of the work that people want to use blockchain for by using a segregated data base instead and a decentralized model of data storage and handling. There are a lot of times where you see companies playing the hype or that someone sold you on something that you don't need.

David Mason: When you see these news releases what is something that stands out to you that makes you realize they may not understand what they just got themselves into?

Dan Giurescu: One thing that stands out is when you see them confusing or intermingling public and private blockchain as if they're one and the same.

David Mason: How many different types of blockchain are there?

Dan Giurescu: There's public, private and mixed. Ethereum has a public and private component to it. The reality is that when it comes down to blockchain platforms, the hardest thing is choosing the platform that is best suited for your initiative.

David Mason: Is that part of the reason why there's so many different cryptocurrencies? Because each one has a different sort of blockchain platform or application?

Dan Giurescu: Generally speaking, if every cryptocurrency provider or pusher of an ICO truly went out and built the products that they said they would build you would see a lot more blockchain platforms than we see today. Luckily, there are some that really focus on saying that I only want to build my idea on Ethereum, or Hyperledger, or Mavenet Platforms, etcetera. But there are some out there that put out their ICO against a

new platform that they want to build. There are many different platforms, but you need to know why a certain one is right for you.

David Mason: In the next five years what do think the future of blockchain is going to look like?

Dan Giurescu: That's a very good question. To be honest I don't know what the next year will look like for blockchain! But if I had my perfect vision for where blockchain would be in five years, it will have a number of use cases proven and in a production ready state. People would implement it in their organizations in a small component as bolt-on to existing technologies rather than building from scratch and really test out some of the value propositions and where it can be applied. I can't pick that there's going to be one winning blockchain platform. I think that there will be some reoccurring themes of blockchain platforms. What you may see is a divide of the platforms that are best for specific industries. You may see Ethereum be great for one industry and hyper ledger great for another. You'll see a lot of players come in but really fitting in well with specific industries. To me what will be really critical is when we start seeing interoperability platforms that will allow me to transfer the way that I roll a smart contract into one platform versus another.

David Mason: What's your opinion on the future of cryptocurrencies? I'm still a little skeptical myself.

Dan Giurescu: I believe there will be some interesting use cases around cryptocurrencies and how people want to apply them. Myself, I'm leaning towards how you apply a more stable coin currency that will allow people an easier transition and understanding what this is and what can it do for me. No one wants a cryptocurrency that will act like some of the Latin American currencies where they will lose 20 per cent in a day. It needs something to give people some assurance.