Citadel - transcript of presentation video

Afternoon everyone. We're Team Citadel, we are addressing a real-world problem. We are trying to solve for AMLD5, which kicks in January 2020. We are also trying to provide new risk indicators that haven't existed before based on the UBO data that we are able to share between the public and the private sector, and lastly, we are also wanting to boost the SME business sector. All doing that, by using cutting edge technology within the existing legal frameworks. We believe we have the golden source of UBO data register.

Let's meet Alicia, she's the Ultimate Beneficial Owner (UBO) who wants to set up a company, talks to Companies House sets that up in about an hour, then goes to the bank, sets up the bank account, takes couple of weeks, it's getting quicker, but takes a couple of weeks and so forth and so forth. What's wrong with that picture? That takes an hour, that takes a couple of weeks, that's because the banks can rely on the data from Companies House.

Come Jan 2020, regulated entities are required to report all discrepancies and changes to UBOs to the companies House. Now I know you will all know that, I just want to mention that because, at the heart of most money laundering scenarios, there is a company associated, so getting this right, is really important. Let's talk about scale, we know just by the FCA alone, there are 59,000 regulated entities, and it doesn't include the Lawyers and the Accountants, we know that there is about 4 million companies that reside in the UK and there is one Companies House. When Jan 2020 happens, there is going to be a lot of people trying to reconcile a lot of things and sending over to Companies House. I think they are going to lose their minds.

Surely, they are going to get clarifications back because now, they have received 2 pieces of information back on current. Like, what's that about? So, the regulator entities going to lose their mind. Now clearly, someone from there is going to reach out to me and I'm going to lose my mind because I don't know who to go, to do what? This is a real problem, this is a real problem and its approaching. So how do we solve this? Citadel. Citadel, the team, the product met on Monday at the FCA TechSprint.

Rather than taking one bank and UBO register, and giving it to the Companies House which we can all do right now. We are going to take as many as we can, put it through the privacy enhancement technology, connect up to the API with the Companies House which already exists. Apply the fuzzy logic, the machine learning modules and get to the golden source that we referred to earlier. Now, that give us not only the golden source, but also an aggregate of validation of what a UBO is? What the status is? And also, we can extend that further.

Key principles that we've always had in mind, from the get-go is privacy by design, security, financial crime as our focus, and automation, which means taking in mind, we want minimal human intervention wherever possible and we will go through some of these examples. Quickly talking about privacy

enhancement, I know you've had 6 other teams telling you about privacy enhancement, so I'm going to be very quick on this, you can quiz me on it later. That's Alice and Bob, I don't know how many Alice and Bob you've met today? And there is couple of companies and that's how they relate to each other, very confusing.

When we use partial homomorphic encryption, that is what it looks like, no one can read it. This is approach, but the two important parts are between the regulator entities, there is no shared secrets, no one ever finds it, I know you know that, but just got to make sure you know that, for this one as well and that, in our approach, we are able to find the discrepancy still, based on the tokenisation. Now just to give you an example, this is currently in production, in the medical system in UK. So, it's the same approach, and the data over there, is a lot more sensitive than we are talking about here because Companies House data is publicly available.

So, the second part of Citadel, is the smarts that I spoke about. The data sets we were given for the FCA TechSprint, we were able to go through that, and we found out that 60% of the UBOs, didn't exist in the Companies House database. Secondly, the 40% that did exist, there were 27% discrepancy. Now it's a dataset, but what we do know, there are about 350,000 UBOs missing from the Companies register right now. So that's going to be fun in January.

So, why does that matter from a financial crime perspective? The government has got a consultation paper out which is calling for the data at Companies House to be more relevant and accurate. There are a number of different suggestions, Citadel will help with one of the potential solutions for getting that data in place, and also supporting the objectives of getting adequate, accurate and up-to-date data for the register.

One of the points called out in FATF paper of 2018 on the concealment of beneficial ownership. To give you an example of that, the Russian Laundromat case, with over 5,000 shell companies moving £63billion of illicit wealth around the world involved 440 UK shell companies and the reputational impact of the UK of having those shell companies registered here is large.

So what we want to do is improve that reliability and frustrate the criminals, so as a compliance officer how would I interface with this? If I log into the system and I have my bank integrated between our data and Companies House data, I want to see what is the discrepancy, so not only of that discrepancy automated, but I get my idea of which business area that's in, where those discrepancy are found within our data. I am going to be seeing which cases are mismatched and thereby able to put the analysts onto those cases and identify where more work is required in order to get this fixed.

So, the submission is successful, I meet my obligations under the fifth Money Laundering Directive and through the additional data that we will get. I will be able to apply additional risk filters. Given it is a TechSprint demo, it would be

wrong not to do a quick video on what we are doing here, so here, what we are doing here is using Fintech sandpit to drop the data that the FCA provided us - synthetic - then drag and dropping Oracle's data studio to then look at some of the graph analytics that we used. What that is basically showing is UBOs with the most amount of companies, that was not usually possible before, but because we were able to merge, we were actually able to get there quite quickly, that's the tokenised version.

You will also see, further tokenisation and if just in the interest of time, I'm just going to fast forward this one. We are also able to get the number of risk indicators that we didn't have before.

So, we meet the obligations from January 2020, those new risk indicators are there and will help the economy by reducing the burden on all parties, including Alicia and her company. Timeline wise as I said, we only met on Monday, I think we are in a good spot based on what the governance and funding looks like. We have a couple of banks already interested, as well as Companies House. We should be able to get to a proof of concept in three months. Thank you.