Podcast transcript: Regtech and data ethics

Hello, I’m Nick Cook (NC), Head of RegTech, and Advanced Analytics at the FCA.

1. Welcome to this, the first in our series of FCA insight podcasts covering cross cutting issues in financial markets and regulation. Today, we’ll be rattling through AI, ethics, cryptoassets, innovation models and a whole lot in between.
2. We’re recording this at the FCA Innovate 2019 event where we’ve discussed the trends, the priorities and the opportunities for the FinTech and RegTech market in the year ahead. I’m joined by Ghela Boskovich (GB), Founder of FemTech Global and Head of Regtech and FinTech Partnerships at Rainmaking Innovation.
3. Can you tell us a little bit about your role?
4. GB My role? Well, I have designed and delivered a programme for sort of bootcamp and Rainmaking that focuses on very quick to market commercial collaboration between FinTechs, banks, insurance companies and the like.
5. NC Fantastic. And we are joined by Shruti Ajitsaria (SA), Head of Fuse at Allen & Overy.
6. Can you tell us about Fuse?
7. SA Sure, so Fuse is Allen & Overy’s tech innovation space.
8. NC And finally, Teana Baker-Taylor (TBT), Executive Director at Global Digital Finance.
9. Tell us about Global Digital Finance.
10. TBT Global Digital Finance or GDF is an industry initiative to create a supra-national code of conduct for cryptoasset participants and we provide advocacy with regulators and policy makers.
11. NC Superb.
12. We’ve covered a lot of ground in relation to your main area of focus, cryptoassets, today. We’ve heard a lot of conversation about the hype in the market over previous years, some of the missed hopes and expectations but also the way in which the debate and the conversation has matured over the past few months. Can you give us a sense of where you see this market heading and the priorities for the year ahead?
13. TBT So, I think if we look at the year ahead, let’s take a quick look back at where we came from.
14. We saw really the bubble that was promoting the ICO market burst. I think we all expected that to happen, there was a lot of overvaluing, there were a number of, you know, unscrupulous projects that were out there and we’re starting to see what I kind of coin the, coin! The clean-up of crypto. So, we’re now as an industry really focussed on ensuring that our market integrity is sound. We’re holding, you know, marketplaces and exchanges accountable, focussed on consumer protection and education and looking forward I think we’re going to start to see a lot of developments in the security token space which is, you know, really kind of an evolution of ICO.
15. So I think that’s going to be something we see quite a lot of. Additionally, we’re seeing a rise in the issuance of stablecoins, the term’s kind of vague, essentially it could be a fiat-backed coin, it could be an asset-backed token backed by either cryptoassets or real-world commodities.
16. Overall, the consumers are more educated than maybe we were before. Institutions are still interested and engaged in the market, there’s still a significant amount of OTC activity. I personally believe that either lots of things are quoted as inhibitors, custody options, regulatory frameworks but I really think it sits with reputational risk for institutions, for large especially tier one financial institutions to enter the space. So, the more we ensure that we are going to market with good business practices, I think we’ll start to see a greater institutional adoption.
18. NC Absolutely. Ghela, you’re nodding away – do you share these views or do you have a different sense of where the market’s heading?
19. GB No, I see the – after the bubble burst, there’s a recalibration and for any market to have legitimacy, there are going to be points of, inflection points that require recalibration. So the overvaluation of Bitcoin at the end of 2017 was quite interesting and the descent -
20. That’s actually been very encouraging in part because it adds an element of legitimacy which is almost paradoxical.
21. TBT It’s price discovery, natural price discovery.
22. GB That’s – there you go, you actually find what the market can bear, right?
23. I think the notion of cryptoassets being now covered by policy or being considered by policy also legitimises the market which makes it much more interesting. We were talking...
24. ...about sort of where is cryptoasset regulation going and now that we have policy papers, we actually have active regulated exchanges, those sort of things are really encouraging. I also think from a value perspective that we’re shifting away from this notion of having a commodity as an asset and being tied to traditional definition of what an asset is and when you can start to tokenise theoretical concepts as having value...
25. GB ...we can securitise things that we have never been able to do before. This actually creates an interesting notion of value in the marketplace itself...
26. ... where one of the first conversations I ever had about this was around world of war craft identities and powers – power-ups.
27. TBT Absolutely.
28. GB There’s a market for that, there’s an exchange market for that and gaming of all things is sort of the perfect metaphor...
29. TBT Crypto and gaming are a match made in heaven.
30. GB Exactly, but that’s it, extrapolate that to the bigger marketplace, right? And now you’re having these micro-markets that have the secondary asset class that we can now tokenise that actually have an interesting way of increasing on a very large scale financial inclusion to those who haven’t actually been able to participate in a market before. So I’m really encouraged and fascinated by the fact that we can actually truly create wealth outside of natural resources and commodities that we see today. So there’s no limitation to wealth that’s dependent upon what we currently understand in a material world which, in my book, is also an incredibly green initiative. So, yes.
31. NC So what do you see the role of the regulator as being? You talked, Teana, about a degree of self-regulation or a degree of industry collaboration around what the standards should be at a global level. Ghela, you mentioned that actually regulators putting out policy provides some legitimacy and some cover and some security around the market so where do you see the regulatory focus needing to be in the crypto space over the year ahead?
32. TBT So, I think it’s not a one size fits all answer. This is my personal view and that is where you have an on-off ramp between fiat and crypto, there needs to be some kind of governance there. So, I’m primarily talking about exchanges and custodial wallets. If you are issuing something to sell especially in a retail market, so I’m not talking about accredited investors or sophisticated investors, but putting out ads on tubes and taxis, there needs to be a level set of treating customers fairly, explaining the benefits, explaining the risks and really ensuring that people know what they’re investing in.
33. NC So, let’s move into that space of how do market participants and regulators learn, experiment, understand these sorts of innovations. Shruti, we’ve seen lots of different models for how we might go about doing that whether it be through collaborative hackathons, whether it be through innovation labs, sandbox experimentation, accelerators – there’s all sorts of different models out there. What we’ve also seen is some of these innovations have struggled to come to market because the return on investment expectations and timeframes are very, very short for some of these technological innovations. So what sorts of models are you seeing that are working well in getting these innovations into the market and which ones are you finding particularly effective in helping us better understand the innovation and get under the skin of them?
34. SA Yep. I would have a big, big vote in favour of the sandbox model and I think it’s one of the things that really sets the UK regulator apart because we have been fortunate enough to host over the last eighteen months one of the company’s that has been in all four of the FCA sandboxes and when you look at some of the stuff that they’ve been doing, so, for example, they did the world’s first every crypto-bond issuance on a public block chain and they did that within the confines of the sandbox which meant that all of the questions that they had around whether or not they were acting on the fringes of what might be regulatory compliant or otherwise, they actually had a sort of safe space and an opportunity to ask the questions that they weren’t sure on and I think from a really practical perspective, in order to be able to regulate well, you have to understand the products that you are regulating and oftentimes if you come to a product when everyone else has done all of the learning, it’s actually too late to join in that learning process whereas by doing the sandbox, what I think you have the incredible benefit of is doing the learning at exactly the same time as the people who are creating the products and there is no substitute really for that, to my mind. So, to me, I think the sandbox is one of the most fantastic things that we are doing.
35. SA From my perspective, I suppose running an incubator-type model is great but only if you can actually get the participation of everyone that’s around you so I think sometimes you might see an incubator which is an incubator for the sake of, I don’t know, getting a stake in a company rather than for learning purposes, so I do think sometimes you have to ask yourself “What is this trying to achieve?” For us, with Fuse, we’re very much trying to learn about what is happening in the environment around us.
36. TBT What I think is really interesting is what sounds like to me the way you described it is as an almost acquiescence to this isn’t a commercial venture for the purposes of developing this thing, we’re adding to our learning and our credentials and our subject matter expertise and that’s the value that we’re getting in exchange for revenue.
37. SA And so I think what’s been very nice for us about Fuse is it’s very different depending on the company that we have in so interestingly we’ve taken an equity stake in the company that I just mentioned that has been in the FCA sandboxes because in this particular instance actually I think it is about taking a long-term view and looking at what they’re doing and saying, right? It does to some extent cannibalise our current model but we have to be realistic about what’s coming down the line and we are either a part of it or we’re going to miss the boat.
38. GB Precisely, yes.
39. SA So, in that instance, we have taken an equity stake which we haven’t done with the other Fuse companies...
40. TBT You heard it here, folks, big law firm took an equity stake in a crypto company...
41. GB But it makes perfect sense, learnings are one thing, there’s also how do I stay commercially relevant and how do I actually stay commercially relevant when my entire business structure fundamentally is going to be changed by this technology because it doesn’t deal with what I traditionally know, i.e. money movement.
42. TBT I think that traditional FIs [financial institutions] are regulated entities, well, I know they’re regulated entities and they have, they have to answer for what they do and if you’re bringing assets in, it’s like, you know, bringing in stray dogs into your house, right – they could be lovely or they could eat your kids, you know – you don’t know, right?
43. SA Probably the latter!
44. TBT And so, you know, your hope is that, you know, it will be symbiotic but if you’re bringing in assets and you have any concern about the source of funds...
45. I also think that there is a balance sheet issue – how do you hold security tokens, crypto currencies, all the stuff on your balance sheet so there’s a treasury element that hasn’t been quite figured out. I think there’s a couple of things but yes, I think predominantly there’s fear. The other thing to consider that it is disruptive, so if I am a fiat business, if I decide that I’m going to now enter this additional space, I’m disrupting myself – there is an element of that.
46. NC Do you think regulators could or should do anything to nudge this forward? You spoke very positively about Sandbox but are there other things that you think we should be doing to continue and accelerate the pace of innovation and change and disruption that we’re seeing?
47. SA Partly I think you’re responsible for an education piece, actually. I think part of the fear comes from a lack of knowledge and a lack of access to what the implications are and I think your responsibility towards the market is an education piece at this point.
48. GB I’d actually say defining the liability structure – that’s so missing and I think when there’s the comfort of being made whole in some way, shape or form, or we know where the accountability lies and can, you know, either fine or punish the bad actor or reign that in, it’s a liability structure. If there’s something out there that informs that and then people in my experience are much more willing to engage.
49. TBT There’s also context so I’ll be a little controversial here. If we look at the last couple of weeks, you know, Danske Bank just got nailed for a huge amount of money laundering, a few months ago it was HSBC, you know, a few months ago it was – like, I could go on and on and on. There is, I hear all the time, “Bitcoin is anonymous” – the Bitcoin is not anonymous, let me say that again, “Bitcoin is not anonymous”. So, if I really want to go back through an audit the blockchain, I can tell where that coin has been and Europol has actually said publicly, you know, “We love it when criminals use Bitcoin because we can go back and track them down”.
50. But also I think we need to take a step back from this fear around a bearer instrument, understand that the pound notes in your pocket are bearer instruments and there are lots of ways to, you know, buy marijuana and sometimes that’s Venmo and sometimes that’s the fiver that’s in your wallet. So the idea that crypto is facilitating crime and, you know, disparity is not entirely true. No more so than cash.
51. Above the rules that exist whether legal frameworks or regulatory frameworks, there is a standard of business practice that is ethical and just because something is legal or illegal doesn’t necessarily mean that something is ethical, so just because you can doesn’t mean you should or shouldn’t.
52. NC So you’ve touched on ethics and we’re going to change tack a bit and I’m going to ask each of you to do a bit of a quick fire answer to the question. There’s been a lot of debate around what does ethical use of Artificial Intelligence particularly mean in financial markets, how do we keep people safe, what does ethical use of data look like, what should our expectations around things like explainability and transparency of algorithms be? Can you, in 30 seconds, give a sense of where you see this debate heading in the year ahead because I think it’s been a debate that’s been raging for the best part of a couple of years now at least and I’d love your sense of how you think we move this forward and where you see the debate going.
53. GB So, algorithmic bias being the primary problem, right, ethically designing an algorithm is one thing. It’s actually more of the datasets, how do we actually curate and tag datasets that remove aspects of bias in terms of, say, region, volume of transactions, geo-location, pattern of transaction purchases – all of those different things that have an assumption that will be tied into race, gender, religion, education etc. So, dataset cleanliness in terms of AI, how do you actually ensure that or how do you remove some of the current bias that exists in how we curate so the data science side becomes interesting. I think from an ethical AI perspective, that’s one of them, it’s what the input that then dictates the output, the assumption and one of the challenges with bias is that the assumptions of the outputs or the users of that - emergent bias is what they call it in terms of a new policy, a new moral market code, a new phenomenon, a new meme, for example, actually wasn’t conceived of when the algorithm was designed or the dataset structure, so how do we start to adapt to this emergent bias of things that we didn’t know we didn’t know were coming up.
54. GB I mean, right now that sounds a bit more esoteric and it hasn’t really answered your question, Nick, but I think we need to step back and take a look at the data science thing in terms of algorithm bias when we’re talking about AI application because we’re making assumptions. An algorithm is essentially just an assumption and the datasets of a user validating or disvalidating [sic] that assumption. So, where is the inherent bias in that particular assumption? And when we compound it with the component of machine learning where input produces output which then serves as input for the next micro-calculation and we compound that, how do you unpick it?
55. GB So, to a certain extent I don’t have an answer, I don’t have a silver bullet but I know a starting point is definitely recognising the aspects, the general aspects of bias that go into the assumption making the data sorting as we start to process.
56. NC Shruti, is it about bias or is it somewhere else that you see this debate...
57. SA I find this difficult, I find this so difficult because we are talking about the ethics of AI and ensuring that we have a pure dataset and that things are being trained without bias but if I look at my day to day life, you know, I work in a law firm where we are talking all the time about ensuring that we have enough women in leadership and that we have diversity in leadership. So, I mean, the fact of the matter is we haven’t got it right actually with humans and what we do every day. I spoke to the Ministry of Justice around should we be using algorithms for sentencing, for example, would that give fairer outcomes and how would we ensure that we have fairness in the training? But it’s a ridiculous conversation to be having if we look at what our judiciary looks like today, it just is because we haven’t managed to fix the problem of having a diverse judiciary, let’s not move onto the next stage of talking about how to have a diversely trained AI...
58. GB But therein lies the thing, we’re compounding it, right?
59. SA We are compounding it, that’s absolutely right.
60. GB We’re compounding current – I mean, AI doesn’t change status quo and therein lies the problem, so you’re right – from a human design perspective, we haven’t fixed, we haven’t made any substantial progress in, and I’ll call it what it is, social engineering for the better or for, as I’ll call it, the most profitable structure which actually is a diverse structure in terms of people on a team or design approach, business drivers are always – it’s profitability, a diverse team actually has better bottom line return on equity and return on investment, EBITDA and sales metrics when you actually have a 25% percentile diverse executive team in any organisation.
61. And that’s the other thing that we ought to talk about in this industry is the complexity of long-term decision-making in some of the infrastructure that we put in and that has not been a conversation, I think that’s an ethical conversation or it’s oriented and rooted in ethics and morality is what’s our long-term decision-making approach here? It requires actually a number of diverse perspectives, it actually requires a number of different models, which is the sandboxing approach, it requires information from outside of our industry that we don’t necessarily internalise and it takes a longer time and I realise that in tech we’re always worried about what the now is and what the next is without looking at what is the, you know, great, great, great, great, great, great, great grandchild of this now.
62. TBT Well, I think that’s it, so if we look at AI and specifically machine learning, so I’m going to be a little ethereal and touchy-feely for a second but if we built something today with a state of mind and a presentness to the moment we’re in, which I don’t think we’re ever really present anymore, and with an objective in mind, there is going to be inbuilt bias no matter what because we’re human beings. So, then, you birthed this machine learning baby and it goes out to learn. What is it learning from? It’s learning from us and so where it’s getting its inputs from all of the input and the input that we’re putting in so going back to what’s ethical, what’s perfect, is flawed. It always will be...
63. GB Because historical data is always...
64. TBT Because we’re humans. Even if the data is perfect and clean and I get what you’re saying but I guess my point is I don’t think it ever can be because the data is coming from human beings who will forever be, if you’re a philosopher, flawed in some way. There is no “perfect” so I think we need to understand that the machines that we’re programming to learn are learning from us and if you want a more ethical machine, then we need to be more ethical people.
65. GB Amen, sister, preach, preach. No, completely agree and I think therein lies the challenges that we haven’t had – there hasn’t been a call to action and there hasn’t been a demand for a rigorous, robust and actively canvassing for more people to participate in that particular conversation. It is, in my book, the 600lb gorilla in the room that the ethics and morality have not been addressed explicitly, we don’t use those terms around it either, we don’t use the language around morality or ethics, instead we talk in ROI and profit margin and margin meaning that emerges on your balance sheet or shifting the balance sheet or your portfolio risk. We talk about it in terms of understanding from this industry, we don’t talk about it in terms of what it actually boils down to.
66. NC So who and how do we bring that debate to the fore? Is it civic society, is there a role for regulators, is it industry-led, is it all of the above? How do we get that debate?
67. GB All of the above but I think somebody’s got to carry the banner and quite honestly I do think the regulators are in the perfect position to do that, in part because they’re setting the framework under which this is going to operate so who better to actually insist on the structural integrity of that framework than the one who has to police it?
68. NC It’s not solely a financial services question though, is it?
69. GB No, it’s not, but somebody’s got to carry the banner for it so who you invite to the table needs to be inclusive but I do think that there is one entity that is perfectly placed to sort of cheerlead that and bring the collective together. And I do see it as a regulator’s role.
70. TBT I think the thing, going back to the human element, is especially in finances services, it’s been proven over and over that we say, and we have absolutely the best intentions to save for our retirement and put money away for a holiday and, you know, have money for our child’s education, whatever – we say these things, we believe them, they’re not lies to ourselves but then our behaviour manifests in a completely different way that is completely contrary to what we say and what we actually believe.
71. So, where’s that gap, right, and I think the AI space is a classic one where you build the thing, you put it out into the market and them people say, “Oh, I didn’t really want you to send me a nudge every time I overspent at Pret”, or the Monzo thing, “Look where you spent your money”. People were like, “Oh my god, where did I spend all this money?” Well, yes, so do you really want to know? So it goes back into that design, so the ethics around what we say we want and what we actually want, I think we need to be really a lot more honest with ourselves about how much data we’re willing to intake, what we’re trying to get out of it and, I mean, maybe it’s too much.
72. SA Just actually to be a bit boring and go back to something that I said earlier though, this to me is not a question for the UK regulator, this is actually a question, this is a global question and so it needs...
73. GB I agree but there is one, I think there is a party that can say “I can rouse you together, I can bring you together collectively”. Interesting to point back to that particular question, does it need a global standard, does it need a global alignment? I think, ideal, absolutely. At the same time, I’m going to acknowledge there’s cultural relativism, you know, and I can’t presume nor can anyone actually presume to know what is best for anybody else.
74. With that notion of, say, universal basic income and non-nudge, just default actions on, you know, everybody has to save 10% sort of thing, I mean, whatever example you want to throw in there. At the same time, do you want to violate what we understand is the individual right to act? None of this is – no-one’s got the perfect answer, there’s a more balanced answer for different jurisdictions. I think in terms of the setting up a marketplace and fairness of marketplace and actor standards, I mean, the ethics of it, the framework, the sort of – here’s how you get to act in this that we can actually do better alignment on that, so in terms of do we need a global standard or do we need more global alignment – it would be awesome. Is it going to be easy to do? Absolutely not. However, I do think having discussions at that sort of meta level actually matter and we don’t actually acknowledge it as often as we need to.
75. NC Final question for each of you. You have a choice – number one priority for the year, number one hope or number one fear. Teana.
76. TBT I’ll go with priority. So, my number one priority is to – this is going to be very boring – it really is to grow an organisation that has the input and community contribution from the cryptoasset participant community along in partnership with regulators, policymakers.
77. NC Fantastic and where can we find out more about Global Digital Finance?
78. TBT You can go to our website at gdf.io.
79. NC Lovely, thank you very much. Shruti – priority, hope or fear?
80. SA Priority. So, I think just drawing really on all of the strands of the discussion that we’ve had, it feels very much to me that we need this conversation to be had on a broader basis and so for me personally, my priority is ensuring that I’m doing that within my law firm so I’m not just attracting the small number of people who maybe are in Fuse everyday talking about technology but instead that everybody acknowledges that this is coming and the train has left the station and that this needs to be a part of our everyday lives.
81. NC Fantastic and where can we find out more about Fuse?
82. SA If you go to the Allen & Overy website, you will find out all about Fuse.
83. NC Lovely. Last but not least, Ghela – priority, hope or fear?
84. GB This is a three for one.
85. It comes down to proving collaborative work can actually happen quickly and...
86. TBT Oh, that’s a good one.
87. GB ...with those who...
88. TBT I’m going to steal that, it’s mine, no, that’s mine.
89. GB You can borrow it.
90. You know, what it comes down it is we can actually prove that commercial collaboration can happen incredibly quickly and that goes for any institution in any particular industry. Most of all, my concern is definitely around finance, financial inclusion, the regulatory space, being fully included also includes insurance, but we can do it quickly, we can do it where it is commercially viable at the end of the day and that all of the shenanigans around collaboration that we’ve been bantering about for the last few years, myth bust them, that you can do it at speed with profit in mind, with real solutions that are market-ready and that will actually impact your business today, in future for tomorrow.
91. NC Where can we find out more?
92. GB So, right now, under “Rainmaking” look up Start-Up Bootcamp CoLab, or I often tweet about it @ghelaboskovich.
93. NC Fantastic. Teana, Shruti, Ghela, thank you for being the guinea pigs for our first podcast, I’m Nick Cook, thanks for listening