Daniel Liebau, Founder of Lightbulb Capital – Interview Series



Daniel (Dan) is the Founder of Singapore based Lightbulb Capital. The firm was founded in 2014 in Hong Kong to help realize the potential of innovation and novel technologies to transform financial services. Today the company is a corporate finance boutique with a focus on FinTech and blockchain.

Dan is appointed affiliate faculty of Singapore Management University for Innovation in Finance, FinTech, Blockchain, and digital assets. He is also a visiting professor at IE business school in its top-ranked Master in Finance program. He is also a Review Editor for Frontiers Financial Blockchain academic journal and works on research projects. In addition, he is a frequent speaker at seminars on Blockchain and Innovation in Financial Services. Before starting the firm, Dan was Chief Operating Officer (COO) and an Executive Director of HSBC Securities (Singapore) Pte Limited. He was previously also the IT Head of HSBC's Investment Bank in Singapore and Japan. Dan has over 19 years of Investment Banking Technology experience at UBS in both Germany and the UK, Barclays Capital in both Singapore and Tokyo, as well as Close Brothers in Frankfurt, his hometown.

He is also a Ph.D. Candidate within the Finance department of Rotterdam School of Management, Erasmus University where he researches Blockchain and AI and it effects on Finance. Previously he graduated with a Master of Science in Innovation from Singapore Management University and holds a Master in Finance from IE business school in Madrid, Spain.

You've recently written a research paper entitled 'Cryptocurrencies & Initial Coin Offerings: Are they Scams? – An Empirical Study'. This paper argues against the conventional wisdom that the bulk of ICOs launched in 2016 were scams and that in fact, most were legitimate initiatives. Do you believe that this would hold for the 2017/2018 ICO period?

Hello Antoine, Thanks for having me today. It's a pleasure.

With regards to the "ICO Scam paper" that I have written together with my co-author Prof. Dr Patrick Schueffel I'd like to think about almost like a conversation starter. There are lots of opportunities to deepen our understanding of the topic. Running our research process on 2017 and 2018 ICO data is one of the recommendations we added towards the end of the paper. I

am discussing with various universities, also with a prominent law school in Asia, to execute this.

Then we want to proceed with the development of the 'Crypto Scam Probability Index' that could give traditional financial services firms a tool to assess projects. It could be useful for custodians, asset managers and banks and their clients alike. At this stage all I can say that 2.2% of, say, 5000 ICOs is still 110 projects... a number high enough to build tools and processes to protect investors from scammers.

# What's your take on IEOs? Is this an improvement over ICOs?

Thank you for this great question. Mostly, utility token projects do not deliver a service to their stakeholders at present. Therefore there is no real demand for tokens. We have speculators trading against speculators. I think we need to watch what exchanges do carefully. Some of them have taken measures to implement control mechanisms, especially with regards to their listing governance. This is probably positive and adds to their maturity. At the same time, I am sceptical when I see that listings departments also have sales targets. Even more concerning is that in some cases IEOs have to be paired with the native exchange token.

I ask myself if this drives the demand for the exchange token artificially? I also wonder how exchanges manage conflicts of interest. For example, how can exchanges have VC funds that invest in projects that eventually list of their market? Again, I believe that over time, we will see a lot more mature operations succeed. In the traditional markets, not anyone can be the CEO of an exchange, and that is for a good reason. I look forward to trading platforms taking things like trade surveillance and governance a notch up from where we are now to impart investor confidence.

Lightbulb Capital has partnered with SMU (Singapore Management University) to offer an introductory course on digital assets and cryptocurrencies. In your opinion, what are the biggest takeaways that students should take from this course?

Thanks for bringing this up. First of all, I believe in experiential learning so that participants can expect loads of work and little one-way lecturing. I do like to invite industry-leading guest speakers, too. Three main points:

1) Utility Tokens are (ideally) not issued by a company but by a community or foundation.

2) Students learn the basics of blockchain technology, hashes, consensus algorithm, private/public key and the trilemma (scale, security, decentralization) and many more.

3) We aim to impart some confidence so that participants understand the risks and opportunities of this emerging field – critical thinking being essential.

We are also expanding the course from 1 to 2 days because it was simply not enough time to build a strong foundation.

You are involved in the world of academia, both teaching and research. Do you believe that most schools are adequately preparing the next generation for the current advancements in fintech? If not, what should be done differently?

There is always the opportunity to improve. I think one thing that universities are generally not so strong in is speed. SMU, where we started the first FinTech class more than three years ago, is part of a small group of institutions that represent the exceptions. Rotterdam School of Management at Erasmus University is very strong on the business administration research side as the latest Shanghai report confirms. The research process in general is too slow for our exponentially accelerating times.

Coming back to teaching: I think some topics can be taught very well using digital media. If you want to learn about data science, for example, explore the offering of the newly launched FDP Institute. Mehrzad and team provide a fantastic platform to learn more about how to use data science in finance. Some topics can only be taught in a classroom, mostly the ones that require teamwork. Take Service Design Thinking. We happily work with corporations and Universities to deliver such hands-on programs. There is always a focus on action to ensure people can immediately apply what they have learned in their own work environment. Unfortunately, some universities still focus on learning facts by hard to test them during exams. I feel that is probably antiquated.

Lightbulb Capital offers speaking engagements on AI, and you are personally well-read on the subject. Do you foresee a future where AI has more influence on fintech?

To clarify: I am at best a beginner level student of AI. It will take a few more years for me to have true in-depth understanding of this enormous field that goes way beyond Machine Learning. Machine Learning itself has become such a vast area itself. From what I can tell now, AI already has a substantial impact on the world of finance. This impact exists mostly due to easy access to enormous amounts of data and exponentially growing computing power. For example, look at what Marcos Lopez de Prado at True Positive Technologies and Cornell University does. It makes clear that plain vanilla statistics alone does not cut it in financial markets. Check out this latest interested: paper if you are https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=3365282. One topic that we will hear a lot about in the next 12 months is the ethical use of AI in Finance, especially in Financial Markets. Ethics is something regulators, CxO level folks and other market participants, as well as end clients, have to think about deeply. Exciting times and I am looking forward to contributing to the discussion.

Security tokens are currently popular with tokenizing venture funds and real estate. What are some use cases that you are personally seeing?

Security tokens – indeed a fascinating topic. I am currently working on a research project to explore this area more. It's early days but a few takeaways. One of the leading digital asset databases compiled by the International Token Standard Association (ITSA), which we are a

proud Associate Founding Member of, contains 600 tokens in total. Only 30 of them are classified as an investment or security token. Second, I do understand that due to fractional ownership assets that used to be difficult to access, such as fine art, are now more accessible. At the same time, with the well-known restriction to accredited investors who understand valuations, we really need to ask ourselves who will provide that liquidity? Who will buy these tokens? Until I see liquid STO markets on electronic exchanges, I dare to believe that there might be a wrong expectation in the market. The above does not mean that I do not think that this is a very inspiring space with much potential in the future. I am keen to see the opportunities in traditional, listed, equities, too. The instant settlement could free large amounts of capital that is "stuck" right now. Also creating diversified portfolios no matter how small your investment amount is, could be a massive step in terms of financial inclusion.

You're based out of Singapore which is an influential hub for cryptocurrencies. Do you foresee Singapore taking the lead ahead of Switzerland or Malta? I am thinking in terms of adoption of crypto, and businesses being headquartered there?

It is hard for me to predict who is going to lead. I only have done minimal research on Malta. I do advise anyone who asks to think carefully and then chose a mature jurisdiction. In Switzerland, share registers are maintained by the issuers. So they can sit on the blockchain. This is key for the swift development of the security token ecosystem. In other countries, share registers are maintained by a government agency. Switzerland is also home to a number of exciting companies like Sygnum, Daura, MME and Metaco.

On the other hand, Singapore has arguably one of the most, if not the most, forward-looking Financial Services regulators in the world with MAS. It is exciting to watch how they combine sound risk management and investor protection with Innovation like few others in the world. In addition to that, Singapore's other government agencies like, for example, IRAS, the tax authority also leads when it comes to utility token taxation. I might be biased, but Singapore is already in a dominant position. What excites me about Hong Kong are the execution-focused entrepreneurs like, for example, HEX Trust in the custody space.

What are you most excited about in this industry?

I am fascinated by the fact that everything moves so swiftly. I am by nature a curious person so the never-ending updates and developments globally I find superb. If I had to name one particular area, then it is that I see how more and more initiatives are now working on "how to get the rubber on the road". Adoption and execution move to centre stage and unrealistic "getting rich quick" topics fade away. I think this is positive. Yesterday the German government announced a Blockchain strategy as a country. In The Netherlands, I am supporting the 2tokens project that looks at adoption through a financing lense. In Singapore, I look forward to helping the Blockchain Enterprises & Scalable Technologies Association. It is early days, but we are thinking about how to enable people to take full advantage of blockchain.

Is there anything else that you would like to share?

Thanks for this opportunity. Yes, I want to encourage everyone to read more academic research to complement the rare pearls of wisdom on Medium. Here are three relatively new journals to check out:

the British Blockchain Association Journal

the Frontiers Financial Blockchain Journal

the Stanford Journal of Blockchain Law & Policy

Passionate individuals who push for evidence-based research are running these up and coming publications.

Finally, thanks for having me Antoine and I hope we can stay in touch and talk again.