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INSPIRATIONAL INNOVATOR INTERVIEW TRANSCRIPT – SUZANNE MITSCHKE

This interview took place during summer 2020 as part of SIE's Festival of Innovation. The video of the interview can be watched in full on the Scottish Institute for Enterprise's Youtube Channel. (youtube.com/scottishinstituteforenterprise).

[Music]

QC-Hello I'm Quentin Cooper, welcome to the second of these Imagining the Future interviews as part of the Scottish Institute for Enterprises Festival of Innovation. Thanks for joining us and today a particular thanks for joining us because here to share insights, hindsight's, foresights and other things that excite we have Suzanne Mitschke, who as well as being an anagram of man uses kitchens and the slightly more timely inappropriate sick humans tense is the co-founder and CEO of Citrus Labs. One of, if not the most advanced global platform for recruiting and retaining patients for clinical trials. Now we're going to get on to how what that means and how Suzanne ended up right at the very forefront of medical research at a time particularly when all of us around the world are increasingly aware of the importance and urgency of reliable medical research. I'll talk about that and other things over the next 20 or 25 minutes or so but I'm also keen that I leave some time at the end for your comments, your questions and you'll see on the screen that little Q And A box at the bottom so as soon as you've got anything you want to get asked put it in there. Okay so first Suzanne somewhat predictably I'm going to say thank you thank you for joining us and where are you joining us from?

(SM) Suzanna Mitschke- Well thank you for having me, I'm actually joining you from Santa Monica in California which explains why we're not doing this at our usual 12 30 time because it would be hideously early in the morning for you as well.

QC- Now second, slightly less predictably I want to give you a few lines from David Bowie classic, don't worry I'm not going to sing um, but here we go "my brain hurt like a warehouse it had no room to spare I had to cram so many things to store everything in there and all the fat skinny people and all the tall short people and all the nobody people and all the somebody people I never thought I'd need so many people". Now as I'm sure some of you watching would have realized those are from five years, one of my very favourite David Bowie songs but actually I've chosen it not just because of the five years thing which I'm going to talk about but there's a lot in there that we're going to come back to over the course of this interview. So let's start with the bit when it was five years ago you

had no room to spare because you were in a flat in Glasgow but you're originally from Germany so can we start by just getting how you ended up there.

SM- Yeah absolutely so I'm originally from Germany, after completing my high school degree I actually moved to Austria and Vienna and completed my bachelor's degree there. Then it was time for me to pick a university to do my master's degree I looked at London, I also looked at Edinburgh and obviously Glasgow where I ended up. From what I've seen on tv and also did my research I've never been in Scotland before I actually found Glasgow to be the best choice for me because great university and it seems that especially the people in Glasgow seem to be very friendly and it turned out to be true and I think going to the university of Glasgow was probably one of the best decisions of my life.

QC- Now that, for a lot of students would be enough, you've chosen a great city you're having a good time but you somehow while you're in that flat managed to come up with an app that became well it became one of the number one ranked free health app it became a the fastest growing assistance platform for people affected by dementia so how did that happen?

SM- yeah we even had times where we were ranked on the apple app store before weight watchers and weight watchers obviously they had like a huge marketing budget and we had basically nothing and how that happened is that my two co-founders and I we started that together in Glasgow my co-founder Roger he cared for seven years for his grandfather with Alzheimer's and this is basically how it all got started but obviously you know now we're doing something entirely different.

QC- We'll get on to the entire year you make it sound logical it's one thing and we and a lot of us my mother suffers from Alzheimer's and I'm sure a lot of people watching this will have relatives or friends affected but it's one thing to have a friend whose grandfather has got Alzheimer's it's another to think hang on we can do something about this particularly in a somewhat tangential ease medicine way.

SM- Yeah absolutely. So, what we found out is and I think this is very important when we had this challenge where Roger had cared for seven years for his grandfather with Alzheimer's there were many things they have done. What we found out is that somebody who's diagnosed with dementia or Alzheimer's they are basically treated like they are extremely sick and that they are not fully there even though especially in early days of such a diagnosis you can actually live a full life and maybe you don't even notice that somebody has a lot of memory loss and maybe even have an Alzheimer's diagnosis sometimes you know people just think oh this is just age but actually it's not so we wanted to come up with something that actually has a meaningful way of engaging people with memory loss. We did that with a combination of obviously brain exercises, fun and interactive games but also physical exercises, nutrition as well as additional health tips. These health tips included for example how much water you should drink, that you should be active even though you don't have to

have to do a heavy workout you can also just go for a walk for example. Basically giving the people that actually live with Alzheimer's as well as their caregivers so meaningful way of interacting now.

QC- This app was called Mind Mate and I think it was around about this time as well that you first kind of entangled with SIE so what kind of guidance did they give you? What difference did they make?

SM- I think that they played a huge role in the development of Mind Made because we had the idea I think in February-March and that was when the Young Innovators Challenge also took place so we entered the Young Innovators Challenge with Mind Mate and in the end we won the Young Innovators Challenge. Obviously you know we got a cash prize of £5000 that was also very meaningful for us because this cash prize actually helped us to get to a first prototype but obviously also in the course of this innovators challenge we had lots of different workshops for example how to come up with a business model, how to think about competition and this really helped us to kind of fledge out our idea more.

QC- Do you think it also helped being in Scotland? Were they more receptive, a better seeding ground for this kind of thinking?

SM- Yeah 100%, it's not only that I think Scotland is very future driven and it is really helping entrepreneurs I think Scotland is also extremely good because somebody always knows someone so for example when we initially had the idea we got immediately in touch with Alzheimer's Scotland for example and the dementia action alliance for example so these were really good ways of actually validating our idea as well.

QC- Yeah as somebody once said in Scotland there is only two degrees of separation, there's never six degrees of separation as well now you now. So, you started doing this. You're hoping this is going to be commercial again as well, but it is a free app so how did you manage to monetize or did you manage to monetize this

SM- Yeah that's an interesting question: so when we first started obviously we actually included our customers always in the development process of our product we did that with Mind Mate and we're doing that right now also with citrus labs. When we first started we had an initial idea what the app actually should look like, we actually went into nursing homes and we talked a lot to Alzheimer's Scotland as well and also to dementia UK for example as well and ...

QC- Sorry to interrupt but I'll come back but I mean I don't want to jump over an important point but I think isn't it the case that actually what you're making sound normal, a lot of people don't do go and talk to the customers before you're too far down the line.

SM- yeah absolutely so I think this is this is one thing we did well was we talked first to customers before we built a product because this is very important many entrepreneurs they build something, they spend money on building their product, money on getting a domain for example without actually validating that it makes sense for their potential customers so we went out before we had a product we had some screenshots that we huddled together basically and showed it to people that actually work with people with Alzheimer's and dementia. We went into nursing homes and tried it out with people with memory loss and this actually helped us to develop the app Mind Mate based on that we actually tried many different business models because obviously having an app is one thing but then you also have to monetize right because you're a business and it's not you know you kind of have to make some money to actually survive that £5 000

QC- Prize money doesn't last forever yes

SM- Exactly yeah. So what we did is we tried out a lot of things, we tried out subscription didn't work, we tried out in app purchases, it didn't work and many of the people we worked with back then they basically told us you should definitely sell this to nursing homes, to care homes. So we actually went to a lot of care homes we pitched it, we demoed it, we actually got reimbursed by NHS Scotland for the Mind Mate app which was a huge success but on the other side we were also kind of then the IT department of these care homes and we didn't like that. For example Saturday afternoon or a Sunday morning we've got calls from care homes that told us: "hey my wi-fi is down what do I need to do" and we were like we don't know, we are just providing the Mind Mate app to you. So this was actually nothing we wanted to do further so that was the time also when we went to New York to do the textiles program and we experienced a pivot.

QC- Well yeah I mean this is, even if you've not raised a huge amount of money, what you have done is vastly raised your profile so much that big pharma begin to come seeking you out.

SM- Exactly! So one thing that we did very well because we worked with customers from day one is that we had a product that was resonating with many of our users and it was resonating with the memory loss community. So what we had was lots of word of mouth going on we were in one nursing home then these people told other people about it then another nursing home took it over also communities formed in many different cities in the United Kingdom as well as in the US where we saw the app downloads and also usage went up. Also big pharma saw that the Mind Mate app was used a lot in the Alzheimer's community; now what happened then was that big pharma actually contacted us in 2016, so one year after we launched Mind Mate they asked us if we could help them to recruit for some of their clinical trials in the Alzheimer's space because they had huge losses basically in patients and also they weren't able to actually get enough patients to enrol in their

clinical trials. What they usually would do is they would run ads on tv, they would run ads on radio, run ads in magazines, but also through social media but it seemed not to work for these Alzheimer's population that they needed to reach. That was the first time when we got in touch with clinical trials and from there we said yes because we were in New York, we had no business model, we just decided to not continue with selling Mind Mate to nursing homes and this is when this pivot happened.

QC- But this is an amazing thing I mean, when you say it with hindsight it seems logical but to have the might of big pharma going we've had these problems with our trials. I think there's something like I think there's 86 percent of clinical trials running to problems of one kind or another there are instances; even recently I think Novartis had to abandon a potential Covid trial because they couldn't get enough appropriate people and then the secondary issues I think we've seen where historically we've had new pharmaceuticals, new medical procedures, appearing on the market and then it's turned out that actually they were trialled on a on a subgroup of the population which did not map onto the population as a whole. I mean it's a huge issue and a major issue and one that can run into millions of dollars and did do a double take when that when they approached you what how on earth can I do anything if you can't do it

SM- Yeah honestly we had no idea about clinical trials back then we just said yes because we didn't know what else to do and we thought well may we try it out maybe it works. It might have been a little bit naive but I think that this was a really good decision after we then talked to them we delivered patients and that actually worked we were surprised by ourselves that it actually worked. Our population actually resonated with participating in clinical trials, these patients then went to the doctors, to a screening and then enrolled in technical drives was really good to see. After this first experiment we decided to look more into this market and what we found out was really mind-blowing this market is heavily dominated by marketing agencies and how the clinical recruitment or clinical trials basically work as you have a sponsor which is the pharmaceutical company they did lots of research already sometimes 10 20 sometimes even 30 years into a drug and then the last step is clinical trials on humans. You have cross in the middle sometimes they are contract research organizations that run clinical trials then on behalf of the sponsor and then you have sites research. These are the doctors that actually run the clinical trials on behalf of farmer because pharma obviously can't do that because it would be unethical they could do some funny stuff with the data, they could make doctors say that it worked to get the results they wanted. Doctors conduct the clinical trials and here we are running into lots of inefficiencies because doctors are amazing at conducting their research seeing patients and providing patient care but they're not that great when it comes to marketing and this is exactly where kind of this misalignment is happening. This is where Citrus Labs is coming in and we came up in the past years with a really good way of actually funnelling patients into the doctor's offices and then also streamlining for the doctors the patient recruitment process so that they can focus more on their patient care and don't worry about the patient recruitment process itself.

QC- and this is obviously where we come back to the Bowie line about "all the fat skinny people and the tall short people and all the different kinds of people" because that's what you're helping them

to find is actually a much broader base and you're able to recruit across demographics and location and whatever other aspects you need to factor in.

SM- Yeah and I think that it's extremely important for start-ups to avoid this tunnel vision because many of my friends and colleagues, they actually had to close down and shut down their start-up because they were so focused on this one idea that this needed to work that they actually failed. What we did with Mind Mate, I wouldn't say we failed because Mind Mate still exists it's still being used and we use it still for clinical trial recruitment, but we had to find a way around how to actually monetize this. Then we found out that patient recruitment is a big issue so we failed fast with the business model for Mind Mate, it took us one year to try out a lot of different business models didn't work and then we kind of saw the first one with patient recruitment that worked and then we built upon that.

QC- I mean in very crude terms you might say you, it's not that you failed it's more that you jumped ship, you're in a dinghy and you jumped into this ocean liner rather than going: we're just going to keep paddling away in our dinghy here because that's what we set out to do. You realized this is an incredible opportunity .

SM- yeah absolutely and this also comes back then to knowing your customer and also knowing what your customer actually wants we tried it out without knowing anything about it but then we talked to customers a lot to potential customers we talked to people we had no relationship with and asked them you know what are your challenges what do you need why is patient recruitment such a big issue for you so based on these answers and structured interviews we had with your people in the industry, we actually came up step by step with new products and new ways what we can provide them to actually build something that's meaningful for them.

QC- Do you think it actually helped that you were coming into the industry from outside? That you weren't contaminated, you weren't indoctrinated to think that this is the way you have to do it you could ask stupid questions and sometimes get really useful answers.

SM- Yeah I personally I think yes it really helps because especially the healthcare industry, not only from patient recruitment but generally, is a fairly antiquated industry and I think if we wouldn't have Covid also telemedicine wouldn't be on the rise right now. I think because stuff worked in the past the healthcare industry tries to keep it that way because it doesn't hurt and coming in from with an outside perspective I think is really helpful in this industry.

QC- So fast forward to where you are, let's not quite get to now but let's say by the start of this year where are you? Clearly you've got international dimensions to what you're doing which is why you're in Santa Monica.

SM- yeah so we actually have an international team as well so our developers and Rodger our CTO and the reason why we started all this is in Glasgow with our developers and we decided to actually have our sales marketing team basically our business development team in the United States simply because the United States is the biggest clinical trial market in the world. This is why we are here but we keep the tech team in Scotland which is a claim a great place to be because especially if you're looking at salaries in San Francisco for example, for a developer they're like 10x of what the salaries are in Glasgow. Where we are today is, so from 2016 to 2019 we focused only on patient recruitment to actually get the right patients to the right doctors and boost these enrolment metrics to actually help clinical trials fill up their needed patients faster. What we found though is that only 25 of these doctors enrol to target and that 15 to 20 percent of these doctors of these sites they don't enrol a single patient so we actually looked at this problem and basically wanted to come up with a product to streamline the process because we found that only delivering patients is not enough even though we had thousands of patients lined up already they didn't get enrolled because of some inefficiencies at these sites. So what we came up with is a new product called Citrus to streamline the whole process of patient recruitment and also patient enrolment so that no patient is missed in this process.

QC- Right now we're running out of time and I'm very definitely want to make sure you get some questions and comments that have been sent in but before we do a couple more from me. So obviously I took you forward to the start of 2020 now since then of course Covid, how has that affected you?

SM- Yeah so pre-Covid we were profitable which was a huge step at any start-up and pre-Covid there were 55 000 studies happening in the United States. Now it's opening up a little bit but post-Covid, now there were 70 studies happening most of them in the Covid space so we pivoted a little bit and we're currently doing only Covid and couple of other studies that are not on pause but our main kind of thing right now is selling our software and not so much selling the patient recruitment service.

QC- But does that not feel an awesome responsibility that the fate of our species might be in your hands it could be your trials that lead to a vaccine against Covid or whatever?

SM- Yeah yeah absolutely. So it's actually pretty good that that we have the opportunity to work on something that important and we actually provide the Covid patients free of charge to our partners.

QC- And I mean coming back to where we started with the David Bowie, five years are you amazed? I mean does it seem like a kind of distant ancient memory of being five years ago given this incredible up down, back forward, twisty rollercoaster ride you've been on since then.

SM- Yeah it was quite a ride but I think it showed that you shouldn't give up because if we would have given up, if we would just have gotten some negative feedback, most people we talked to said that it doesn't work, you're not from the industry, you don't have founder market fit. Just stop and do something entirely different we wouldn't be here and I think this is something to keep in mind that if your customers love what you do and people outside the industry they are sceptic and tell you that nah maybe you should do something else you, listen to your customers. If they even give you money and pay for your service or your product I think this is the best thing that can happen to you people paying you is a clue you're doing the right thing

QC- Now before I hand over to Fiona Godsman from SIE to throw a few of these questions back at you I want to remind you something you said in 2016. You said don't listen to any advice you get, make it work for you so given that people have been listening to your advice for the last 20 minutes should they ignore all that?

SM- Yeah probably not but obviously the same way I said that we got a lot of advice and most of this advice was entirely useless for us because of people not knowing the business well enough, not knowing the industry well enough, so I'm listening to advice of people that know my company extremely well and also know the industry extremely well.

QC- Good, I mean also don't listen to this advice there's also advice you can't if you listen to it then you're breaking the rule and if you don't listen to it then you're breaking the rules so it's brilliantly self-contradictory now as promised we've left just three or four minutes at the end I'm going to hand over to the Chief Executive of the Scottish Institute for Enterprise, Fiona Godsman and I hope you've got some questions and comments for us. Fiona?

Fiona Godsman (FG) - I do indeed. Hi Susanne I actually have quite a few so I'm going to try and just kind of summarize them and wanted to ask a couple around the pivoting actually how easy was it to make that decision was it something that took you a while or did you just know? And linked to that, do you think the experience in Mind Mate was important or useful in your pivoting journey?

SM- I think the pivot itself was extremely easy because it was just adding another business model to it, what was extremely hard is letting go of Mind Mate that was extremely hard. It took us four years, we let go Mind Mate basically beginning of this year where we decided that we are not Mind Mate anymore we are Citrus Labs now. Mind Mate the app does still exist but it's basically just one product under the Citrus Labs umbrella basically but the pivot itself wasn't that hard because the Mind Mate app still existed back then and is still existents.

QC- Great that leads me nicely to one of the other questions actually which was about your view of apps in general: do you think they are an optimal route for start-ups, especially regarding

monetizing? We see a lot of students coming to us with ideas for apps and it sounds like it was a good starting point for you but maybe not the end so what's your general view?

SM- I think that apps are definitely the future because everything is moving away from desktop to mobile I'm using apps for most of the things, I even use my phone sometimes to work. I sometimes the whole workday is just on my phone basically so I use apps a lot but I do see that; monetization is extremely hard with apps especially when they're consumer apps. Nobody wants to pay for anything anymore while I think that there is a bright future for productivity and work related apps I think here you can actually charge also subscription or in app store great thank you.

QC- Now a couple of big questions around Covid: do you think that would create significant change in the world of big pharma obviously you've seen a lot of changes the year but it seems to me that things are just accelerating you talk of vaccine development being so much faster than the past? Also maybe aligned with that, where do you see Citrus Labs in five years' time or is it a little bit too predictable to answer that?

SM- Yeah I think so especially with the research I think for Covid it was also lucky that the research that's currently being conducted was based on research that was conducted already a couple of years ago with the first SARS outbreak so that was good. Obviously right now it's a little bit accelerated but that doesn't mean that it's less safe so that's one thing I wanted to add here and where we are in in the future in the next couple of years, I hope we are all over the pharmaceutical industry with our software because I think we can really make a difference to also accelerate the patient recruitment process because for some studies currently it's taking two sometimes three years to actually complete patient recruitment for the study and we want to obviously accelerate that.

FG- Great and I think it's amazing to see how much you've achieved in such a short time that's all the questions from the audience and from me.

SM- Yeah it's amazing to see what we've achieved in this time as well I sincerely hope as well so Fiona thank you as well.

QC- That is all the time we have today, as well as thanking Fiona of course I want to thank the absorbing ascorbic but never acerbic Susanne Mitschke, CEO of Citrus Labs and Susanne if you haven't gone you never said why citrus, why that name it's very interesting it's actually a Scottish name as well?

SM- so citrus labs because the first clinical trial ever was conducted in Scotland and basically included citrus fruit.

QC-Right and of course there is a great tradition, I think there's a plaque in one of the quadrangles at Edinburgh university about the research on citrus fruit and scurvy. I seem to remember going back here. Anyway next week we're back at our normal time of 12 30 if I can say normal after a sample size of two which I'm sure Susanne will tell me I can't but we're going back to being at 12 30 and that is the idea when most of these will be and it will be my pleasure I hope to talk to Roy Hotrabhaven co-founder and CEO of sports data company player data who aim to give both professional and amateur sportsmen and sports women insights and info they need to go faster, higher, stronger. So make a date with data, August the 6th 12 30 and you can register for free tickets by our website until then thank you for joining us have a nice weekend and hope to be seen by you next week