



Podcast Episode #19 – Chairless chair, with Keith Gunura of noonee, Switzerland

RAW TRANSCRIPT OF INTERVIEW

Balint: I'm talking to Keith Gunura in this interview all the way from Zurich, Switzerland. Welcome, Keith, to the episode.

Keith: Thank you. Hello, Balint.

Balint: It's great to talk to you, Keith.

Keith: Likewise.

Balint: To start off, your concept reminds me a little bit of the technology Forrest Gump was using, the device Forrest was using to be able to run when he was a child and he had problems with using his body, except yours is more sophisticated and it's for another purpose. Can you tell us about the problem you want to solve and how severe this problem is?

Keith: So the problem we want to actually solve is to do with workers in industry who have to stand all day while they work without the possibility or the chance to sit during their work. The severity of this is that as they get older they will start suffering from muscle and joint pain. So, for example, lower back pain is a big problem for aging workers or even workers, young workers too, if you've been working in this industry for a long time. And our solution basically is to minimize these problems, all these diseases that people end up getting later in life. So it also in a sense it's more to help prevent the future problems as well as immediate ramifications that also make the work a bit more easier for the labor class.

Balint: So you're concentrating on the workers because they are exposed mostly to the severe effect, the harmful effects of this lack of sitting. Of course, it can be beneficial for also other people; it's just that you identify this segment of the population to have the most need for this technology.

Keith: Yes. So in Europe and let's say worldwide, the sector, this labor sector where everybody is working, manual labor, and production, and processing, there are large numbers of people within this sector and within this number of people, let's say within this population, I think they say about a quarter of health reports or problems or claims are reported to work and including absenteeism, people not coming to work because they are sick from back pain, is being recorded within the last 10 years. So



there is a large problem within this sector and this is why we focused on this first because there is a real need for such a solution.

Balint: And can you tell us the story about the founding, the circumstances and your motivation for founding the company before we talk about the actual technology?

Keith: Although I think that's a very interesting story because I think depending on which newspaper you're going to read, which timeline you're going to read, it's always going to be a bit construed or a bit twisted. So from my mouth, it was my passion to do robotics. And one of the things I wanted to do was develop something to help humans, humanoid exoskeleton or humanoid robots, let's say. And during my PhD I was working in a bio inspired robotics lab where most of the stuff we were doing, or most of the research we were doing, was focusing only on, let's say, enabling technologies so actuators, stampeding solutions, or systems. But there was no actual, let's immediate application, that could be built.

So I wanted to sort of fulfill this objective and to fulfill this objective I decided to leave my PhD and develop, let's say, a wearable exoskeleton, which was usable. At the time everybody's looking at the Iron Man, everybody's thinking about making something that can lift cars and jump higher, be stronger. I realize that we're not yet ready for that. We don't have the technology, we are not yet at that level where we can make strong motors in that regard. So I decided to strip away all the unnecessary clutter within the idea of the chairless chair and the idea of an exoskeleton. So let's solve a simple problem. And so take away all the motors, take away all the sensors, take away everything that's complicated, too expensive, too heavy. Just take that out and what do we have?

So during this time I was talking to my old professor at the time and we were wearing an apparel, lab apparel and then it was just like wouldn't it be nice if you could sit anywhere you want at any time? And then that sort of when the spark came we said OK. So when we take away all this stuff maybe that's the only thing we can make it do: allow you to sit. And it was going to be for everybody. To cut a long story short, we found out that the average person or basically the everyday person likes things that look sexy. They want something that looks like an accessory. So we decided to focus on industry, when we also did a bit of market research where we found out this big problem. And to sort of validate that why we focus now on this industry and why we stuck to this idea was that our first contacts, BMW and Audi, basically showed a strong need of this technology and we were surprised that there actually is a need in the market. Wow.

And that's why we stuck to our guns and said, "OK, let's push this forward, let's keep going and let's make it as simple as possible because that seems to be what they like."



Balint: Yes, your innovation was even featured on CNN at one point, this was some time after you were in contact with the car manufacturers that you just mentioned now. So can you tell us the story how it happened, because all of us or everybody who is an entrepreneur is dreaming of being featured, especially in CNN, on such a high level. So maybe you can give some tips or the story.

Keith: Okay. It's a very funny story. So it was mostly luck and bad luck at the same time. So during the development of the chairless chair before this whole CNN thing there was an Italian TV station that was doing a documentary on robots. And so, they had been traveling around the world and then they arranged filmings at ETH in Zurich. And we were selected, I think they actually just selected us for the sake because they wanted a large number of material to record and select. So everybody's showing high tech robots, robots that can climb walls, robots that can do this. And then it came to us where we had this mechanical system that was just an exoskeleton. The assistant of the director there was impressed and also the director was impressed by this idea. And so they recorded, I think they spent a lot of time recording our innovation. He commented a lot on it saying, "Hey, this is the only thing I've seen that's useful out of all the robots. Let's have sort of interview," which was also very good luck, "Wow, thank you." That's nice because we thought we sort of had this inferiority complex that we're not too complicated, we're not advanced as everybody else.

Balint: That you maybe oversimplified the problem.

Keith: Yeah, we thought we oversimplified and people are not going to be keen on or find it as... Why is it so simple, what purpose does it make? But he was really impressed by what it did. But then, the guys, we signed this document to give them permission to use the video and what not. And then, we never heard from them ever again. And apparently the documentary never got the funding that it needed to go through to be published.

However, the assistant of the director found a job in CNN in London. And then, he asked me for a reference and I gave him a reference. And then he said, "Hey, let's talk about the project." This was like a year later. They called me and then he says, "Hey, do you have a time to have a phone call?" And I was, "Yes, sure." Then he called me up and then we started talking about the chairless chair and he says, "Oh, that's very interesting. OK, good."

Then, one week later he calls me back up again and says, "We are doing this new segment on CNN and it's my first project, and I pitched to them your technology, the chairless chair. And they really liked the idea and I was wondering if we could use you for the first article?" Then I said, "Yeah, yeah, sure. Why not?" And so I had already told them about how we've progressed, how we made our first contact with



BMW and Audi. And then we decided to ask Audi and BMW just to say, “Hey, we were going to do this article, do you want to participate?” And then, BMW and Audi both said, “No, don’t do this. You can’t. You don’t have permission to use us.”

And then, I told the guy about it, Jacob, I told him we can’t do this anymore because BMW and Audi are not going to do a statement on it. Then he says, “No, I understand. I understand.” Then I was, “OK. Good.” And then, I get a call from an email from Audi saying, “Hey, some guys from CNN are snooping around asking us about the chairless chair. I thought we told you to keep it private.” And then, I called him up again and he says, “No, he spoke to his editor and we’re not going to run this piece, it’s not going to be published. Don’t worry about it. It’s not happening.” Then I sent the email to Audi and BMW that, “No, it’s not going to happen. So I’ve been guaranteed by the guy. It’s not happening.” And then, when I think a few days went by and we were sitting in our lab or in our office, me and my co-founders, and we were discussing and we were just talking, and then we said, “Hey, you know, we are getting a few e-mails now, it’s kind of interesting, right. That’s really cool that we’re getting a few emails. I think people are visiting our website, you know.” And I was like yeah, it’s quite nice.

And then I went home and then I get a text message from Olga Motovilova, my business partner and co-founder, saying, “Check this link out! Oh my god!” Then we saw this CNN article and our YouTube video, which only had 76 views after like two years being on YouTube, just skyrocketed to 500 000 within a span of overnight. And we were just looking at this thing and we were reading. So first I was like, “Oh, they read the article but I’m pretty sure he did not put BMW and Audi and on his facts, little window it says facts, BMW is interested. Audi is interested. Those are the facts. And statements from these companies are not yet confirmed but they are interested in the... And we were just traumatized.

Well, we were traumatized, happy and sort of afraid that we might lose contact or lose the trust from BMW and Audi. So we decided not to actually tell them that article... And that’s really how we ended up on CNN. And it went really viral. We were starting to get calls from a lot of studios in the US asking us to come in and do a talk show with them or present the chairless chair, give it to one of their presenters so that they can talk while wearing the chair. We got all these things.

And then, Audi found out.

Balint: Sooner or later it comes.

Keith: Audi found out. Apparently they were not so sad about it, they were actually surprised that we went so big. BMW, on the other hand, it was not so happy. The person we’re talking to, apparently he had searched. I don’t know what prompted him



to search, everything he searched. He searched chairless chair and then it came out and it just “BMW chairless chair, BMW chairless chair.” And I had to write an email of apology and tell him that there's nothing we can do. And then that's sort of how I'd say we were lucky and unlucky at the same time. However, I think the success of that video basically exposed us to the world within overnight.

Balint: For me the lesson is that you never know that whoever you interact with from the media where that person will end up and through that how your story will end up in a very high journal or outlet, media outlet. So it's good to be nice with people, especially people from the media, and life is non-linear. You can't predict.

Keith: I learned a different lesson. Don't trust the journalists. That's what we learned. Because he promised, he said, “I promise you” and I was like, “That's great.” And then I found this. But after all that we still are very thankful that he did it and it got us very far. That was boost that motivated us to do what we're doing actually.

Balint: And now talking about the technology that we mentioned at the beginning. So what is the technology? You mentioned exoskeleton. Can you describe it? This is an audio only podcast, it's difficult to show, to explain maybe but I would actually put up one photo that we took; you took of me when wearing your device in your office. But can you describe it in words?

Keith: So, in words, exoskeleton is not really that descriptive because we stripped away all that stuff that makes it an exoskeleton. So we call it a wearable ergonomic mechatronic device and what it's essentially is it's a system that would give you, let's say that would ease functionality in your life. So, for instance, you wear this on your legs, you can walk, you can move around. And when you just want to sit while you work it allows you to do that. So it locks at the knee and then all your weight, which would normally be on your knees, and would go to the frame to the chairless chair itself. So this is essentially in a very, I think, in a very simple manner. It weighs only 3.5 kilograms. I think you sort of realized it's not as heavy. It's a bit strange because you're not used to having it and so, on the first time...

Balint: Especially, it's strange when you want to have a rest and you want to kind of sit down and put your weight on it. But you can get used to it that you should not fall over. I mean...

Keith: Exactly. It's like riding a bicycle.

Balint: Yeah. Yeah. And after you came out did you have so many competitors that appeared with similar product? And how did you also find out what kind of pricing you should have so you can be on similar level as the competitors?



Keith: So when we came out there were no competitors that we knew of at the time and it took about maybe a year or two for some to start popping out. A lot of them were focusing in rehabilitation or military systems, and all these basically require electronics and power enhancing giving extra power. And when we had the CNN outburst we were talking about passive dynamics and how passive exoskeleton is going to be, like using passive system to achieve a goal. And this is what shifted people towards the same idea or the same industry.

So now we have a few competitors on the market. However, when I say on the market let's just say they're present. Their pricing is actually, I'm not sure if it's inspired by our pricing or... Because at the time we were also just coming up. There was nothing on the market that we could use as an indicator. So one of the things we did was basically the textbook approach where you either look at the value to the customer of the system and what it's going to help them with in the long run. So we had to come up with a price that gives a return on investment really quick. So some clients, some of the companies that we dealt with wanted return on investment after two years, some have one year, some have five years. And so, this is something we had to do.

So in terms of learning from our competitors what we learned was we are probably in the right market and we started. So if everybody who's joining is now jumping onto the same wagon as you, you know you're on the right wagon.

Balint: Alright. You developed this product partially also as an embedded unit inside an engineering company. So you mentioned that you started out, the idea's coming from the ETH here in Zurich, from the university where you had a discussion with your professor and you did the analysis and at some point later you kind of spun out from the university and then you were doing part of the development at Zuehlke, this engineering company. Or can you tell us the story how it happened?

Keith: So what happened was essentially me, from ETH with the professor we had different views on which products should go so they did not really believe in the chairless chair in a sense, so I left. So I decided to go and focus on the chairless chair itself. And after that we got funding and we developed most of it ourselves, did the user trials ourselves at an early stage and at a certain point we realized that we can't do everything ourselves. And we thought we would do everything in-house, we would do everything in our production and why not. And when we made this realization my business partner Olga basically suggested that we go, I think, we find a company, external company, an engineering company or something that could help us develop or finish, finalize the design, to industrialize it, to make it manufacturable. And that's when we moved to discuss to talk to Zuehlke. And when we decided to talk to Zuehlke, during that same time we had our investors already on board and they also, I think, were a little bit skeptical of the idea because they were all from the same



mindset that we should do everything in-house. However, I think after the first month with Zuehlke they realized, “Yeah. That was I think a good call, a good idea.” So within Zuehlke what they do is they support start-ups. And the way they support them is giving them sometimes an office, the project office that they would use for, let's say for doing the work for the startup, they give that as an office depending on the deal you have, they give that as an office for that start-up to use temporarily. So you can work within Zuehlke or near the project team and do the developing together with Zuehlke. So that's what we are doing now. So we're using the same project office as our office now and we now rent it since the project is over to move forward with the production and let's say serious sales.

Balint: Where are you now regarding the development and how many prototypes have you had so far including duct-tape level prototype, which shows only the technology and looks-like, works-like a prototype. So engineering prototype.

Keith: I don't even know the ones...

Balint: Have you counted?

Keith: No, I used to...like the pictures you see on CNN - I mean those were after weeks of different prototypes because when I started I was basically churning out a prototype every two days because I was trying out different things. And at some point when you're in the zone to try make something and you're just focusing on making something you forget to do the count because we're just wanting to get to something that works. Until now, when we decided to start counting we sort of realized yeah, we should have maybe also remembered how many we've done. So you saw, I think we showed you a few of the prototypes that I'd say survived. And I think we've done in reality which we, without saying the ones we've actually logged down, we've done about 14 to 15 iterations of the product. So it's making small changes, sometimes making big changes and finding out that it doesn't work and trying something else.

Balint: Where are you now regarding the development?

Keith: So now we've actually finished the development and the product is ready for sale. It's actually on sale now. We're now collecting orders. And it's also in production, like getting ready for production.

Balint: So you are collecting already?

Keith: Yeah. Well, we're collecting.

Balint: Yeah. Okay. Alright. And what future do you see for exoskeletons in short? Because you mentioned that you were one of the people who were pushing this idea,



the passive exoskeletons, right? And what kind of near-term future do you see for such devices?

Keith: Like every technology I believe it's still very young and the future will be that it's going to be embedded in your textiles and clothing. It's not yet domestically available and I think that that's going to be the next stage being making domestic systems. And that this is what I believe is going to happen for wearable ergonomic devices but for exoskeletons in a sense I think they're going to be... If they're all giving you strength, their future is military and rehabilitation, and people with medical conditions or limitations, for them.

Balint: So we should be able to see such applications coming out?

Keith: Yeah. Yeah, I think that should be... That's sort of we're really close to that stage yet.

Balint: Keith, let's now move on to the last round of questions. So I'm going to be asking four questions and it'd be great if you could answer short.

Keith: Sure.

Balint: One question is that if you could time travel and go back to a time when you were younger, let's say in your 20s, early 20s, what would you give yourself as notes?

Keith: Basically all the stuff that I've done and tell myself that, "Do it, continue from where I left off 20 years in the future or wherever. I won't tell myself to redo anything. I'd just say, "This is now what's happening so make sure you have that in mind."

Balint: Interesting. The second question. If you had to name a book which one had the biggest impact on your career?

Keith: You're probably going to laugh. It's called Robin Hobb, *Soldier Son Trilogy*. That's...

Balint: Never heard of it.

Keith: Exactly. I've never read these entrepreneur books or anything. I like fantasy books. And for me fantasy books have a big impact in that they're imaginative and create a world that no one else has thought of.

Balint: Yeah. Interesting. Good tip. This is definitely a new entry on my list book recommendations.

Keith: Yeah, try fantasy, don't listen to what somebody else is doing. That's what I would say. You will learn that in the real life.



Balint: Except for this podcast.

Keith: Yeah. Except for this podcast.

Balint: The third question. I'm amazed by habits and what habits do you have?

Keith: Me? Not a lot really, I don't know, I don't think I have habits. I think that people would tell me, people I work with, they might tell me I've got habits, bad habits, good habits, I'm not sure. I think the most common habit I have is sleeping very little. I don't know if that's a habit but...

Balint: Wow. How do you do that?

Keith: I have no idea. Insomnia, I guess. I like to sleep but usually...Actually, a small habit I have is with my business partner Olga. We tend to just sometimes sit and just start talking about ideas or other business ideas.

Balint: OK. Brainstorming.

Keith: I don't know if it's brainstorming but it's more just like imagining the coolest idea out there and thinking how we could do it and if we did it, what would it be like. I don't know, usually taking actions if we can get time, I think you would take action on that.

Balint: Yeah. So living a little bit like or thinking like in a fantasy book.

Keith: Yeah, exactly. Exactly.

Balint: Yeah. Fantasizing. The last question. Because you work internationally, with big international companies, what critical cultural differences have you seen which you could overcome?

Keith: So that's a very tough one because our company is very culturally different in a sense to me being Zimbabwean and my business partner being Russian. I mean she's also got a lot of Canadian influence and Mexican influence, I guess. I don't know if it's true. I'm looking at her to see if it's true. Yes she said, I think she's smiling. It's true. Most of it... I think we dealt a lot with, let's say with German clients. I think how we overcame most of these challenges was just basically adapting as they say when in Rome do as the Romans do.

So we somehow adapted and also tried to in times impose sort of how we try to do things so our company culture approaches certain solutions and certain ideas. And I think also that because we were young or we are young, not we were. OK, I'm not maybe, my business partner is very young. That was also a soft landing, part of it.



because they are...Right now young and energetic seems to be very... It seems to be the buzz.

When they see a startup that's young and energetic they sort of open, relax or slacken out and say, "We're not dealing with suits, we're dealing with a start-up." And my business partner was really good at also emitting a professional atmosphere and how she dealt with our clients. And I was sort of the engineer guy in my jeans and shirt. And I think that gave them a really good balance in saying, "OK, that's the guy who made the dirty work. She is the brains who's doing the numbers and the business planning, and all that stuff." Yeah.

Balint: You complement each other.

Keith: Yeah, I think that's really the major way we get through the cultural differences. Our complimentary parts and our age seem to make people very welcoming.

Balint: Keith, let's now, at least we should close off now this interview because we would have tons of things to discuss. But I also want you to get back and satisfy the orders and the customers.

Keith: Yes, thank you.

Balint: As a last question. What is the best way for the listeners to reach you?

Keith: For me they can basically just reach me directly by e-mail. It's my first name @noonee.com.

Balint: So keith@noonee.com

Keith: Exactly.

Balint: I will put it into the show notes so listeners can contact you.

Keith: That's great. Much appreciated.

Balint: So I appreciate very much, Keith, for your time.

Keith: Thank you very much, Balint. And it was a pleasure talking to you.