

ETH Podcast - Episode 3 - Haelixa - Transcript

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INTRO

(Detlef Günther:) I remember that she came up with this idea that she wants to go into the domain where really you know all engineers believed in something.

(Punit Mehra:) I realized she is pretty tough.

(Michela Puddu:) The pressure comes from the fact that we have funding to reach some goals that we set and things that we promise and we need to hit that goals.

(Jennifer Khakshouri:) *A young chemical engineer has a business idea. She convinces experts and sponsors to invest money and time in her and her idea. And soon she is a CEO of a start-up and has to learn new things from scratch.*

This is the third story of four of the new podcast by ETH Zurich. The first four episodes focus on entrepreneurship at ETH on all levels, from student projects, to successful spin-offs.

I am Jennifer Khakshouri.

CHAPTER 1

(Jennifer Khakshouri:) *Chapter 1 - pioneering*

The start-up world at ETH Zürich is still rather male-dominated. It's difficult to find a woman amongst all the men, but I found one:

(Michela Puddu:) I am Michela Puddu I am co-founder and CEO of Haelixa, a spin off of ETH Zurich.

(Jennifer Khakshouri:) *Michela is in her early thirties. Her path from being a student and becoming a businesswoman had a lot to do with the fact that she landed at ETH.*

(Michela Puddu:) I am originally from Italy. I was born and grew up in Rome. To me the most beautiful city in the world. And I moved when I was about 25 to Zurich for my master thesis. It was supposed to be just a six months stay. And then I enjoyed so much the environment that I decided to stay longer and started my Ph.D. And afterwards I liked it so much I even funded the company so I was eager to continue and commercialize what I was developing.

(Jennifer Khakshouri:) *The company - that's the start-up Haelixa. The goal of Haelixa is to bring a specific method into different markets.*

(Michela Puddu:) The idea is to use DNA as a Marker, as a identifier in order to track product across the whole supply chain.

An example of a solution that we're providing at the moment it's a kit to trace gemstones from the mine until the end customer. So essentially you applied our tracers to the raw stone at the mine and there traces traveled together with this stone and survived processing like polishing cutting until the final product. and on the end product you can do a quick paternity test that allows you to tell where the gemstone come from. So the actual mine of provenance which does not tell the economical value but also the ethical and sustainability standards adopted by the mines in terms of environmental protection working conditions and so on.

(Jennifer Khakshouri:) *Track down the origin of gemstones, the method applies to several different fields, for example in the fashion industry you can track down the origin of different fabrics such as cotton. Or Haelixa is able to find out where pollutants in groundwater come from- this specific idea has already intrigued a lot of people.*

(Detlef Günther:) The strength is that it's a unique opportunity on the smaller scale nano particles to label any kind of product and to find it later on.

(Jennifer Khakshouri:) *This is Detlef Günther. He is vice president for research in corporate relations at the ETH Zürich. Detlef Günther is also responsible for the Pioneer Fellowship program. In this program master or Ph.D. students who intend to develop a highly innovative product, can apply and if they are lucky enough to convince the jury, they get a grant of 150'000 Swiss francs to develop their idea and project for 18 months.*

(Detlef Günther:) I free my agenda all the time to really be present in the jury because I like to hear about the ideas of the youngsters and it's always amazing what good ideas come up. They present it sometimes let's say it not really focused on some ideas it's really a broad range. But then finally what's developed later on if I see them six months later it's just fantastic.

(Jennifer Khakshouri:) *Michela was one of those successful Pioneer fellows. Originally her pitch was focused on the application of tracing fluids to discover more about oil fields. Detlef Günther has a clear recollection of her presentation.*

(Detlef Günther:) Yes I remember that she came up with this idea that she wants to go into the domain where really you know all engineers believed in something and they have spent. I don't want to say tons of chemicals but a lot. And then all of a sudden there's this young lady coming with a bottle of ten mls with these nano particles and she is telling them my material does it better. I remember that I said well what a courage this lady and I wrote down a wish that she will have a lot of success. And I made three crosses very positive because I believe in this idea.

(Michela Puddu:) I was lucky enough to be supported by the Pioneer Fellowship Program. It gives you the chance to do a smooth transition from the really academic work to the more business industry landscape and to learn those things that you haven't learnt during your Ph.D. or during your master.

(Jennifer Khakshouri:) *What are those things you need to know as a business woman and didn't learn as a student?*

(Michela Puddu:) There are challenges on any possible level so that goes from administrating simple things to managing people to legal aspects or negotiation. It's every time something new and something to learn and trying to do it the best possible way.

(Jennifer Khakshouri:) *The Pioneer fellows get free office space in the Innovation and Entrepreneurship Lab, short ie-Lab. If their company develops well they can prolong their stay, past the 18 months but then they need to pay rent. Michela and her company Haelixa are presently at that point, they pay rent for their office and lab space at the ETH Zürich Höggerberg campus.*

It's time to meet her there, at the Höggerberg campus, a hill with a view over Zürich.

CHAPTER 2

(Jennifer Khakshouri:) *Chapter 2 - building a team*

(Michela Puddu:) Here we are in the lab facilities we are renting. It's a chemistry lab. It's where we do the manufacturing of the tracers and also the analysis of samples, of products that we receive.

(Jennifer Khakshouri:) So for me who doesn't know what it is it looks like a scale that's moving with liquid bottles, 2, 4, 6, 8 liquid bottles. What?...

(Michela Puddu:) This sets up to roughly one liter of tracers which essentially is enough to trace the whole lake of Zürich - to give you a scale.

(Jennifer Khakshouri:) wow

(Jennifer Khakshouri:) *Michela spends most of her time in the office space and not in the chemistry lab, even if the lab is an important facility for Haelixa.*

(Michela Puddu:) Myself I do mostly sales, negotiation of contracts and the day to day business even administration and of course I discuss with the team about achievements about what to do next. And I mean obviously with my co-Founder we discuss everyday and agree on the next steps.

(Jennifer Khakshouri:) *She and her co-founder are the core-team.*

(Michela Puddu:) We set up the company two years ago and immediately had revenue so we could somewhat self-finance ourselves. On top of that we receive other grants and funding mostly equity free which allow us to be independent for the first two years and during these two years we had some important milestones, generated some intellectual property. We launched our first product in the mining industry and and we grew the team. So from 2 to now six people and now the turning point is getting an investor in the company so the first equity investment round...

(Jennifer Khakshouri:) *...which we'll hear about again later on. Let's first speak about building up a team - Michela sees this part of her job as one of the most challenging tasks.*

(Michela Puddu:) Obviously we're looking for people that have a technical background that would fit with what we are doing but doesn't necessarily have to fit one to one. So I mean skills can be acquired important is that we see the talent and all smart people that we see can learn fast. So and then what is really crucial is the personality because in such a small team it's important that everybody get along. Otherwise the work becomes very difficult so it's really important to have a team that enjoy spending time together at work and outside.

(Jennifer Khakshouri:) *A little bit like family. It somehow fits to what she says about her company.*

(Michela Puddu:) For me is like a baby so I have all the interest in keeping the baby alive. It is a personal challenge not only a challenge against the outside world. So I mean I want to make it work and then that's the big motivation. We have a vision and we see big potential and we want to make this work.

CHAPTER 3

(Jennifer Khakshouri:) *Chapter 3 - Selling*

(Jennifer Khakshouri:) *ETH Industry Day, that's a yearly get-together of over 500 people from industry and start-ups - an important networking event.. Up at Höggerberg in a hall students and young entrepreneurs have stands where they present the products they have been working on. Haelixa, is present as well. I meet product manager Punit Mehra, a 24-year-old German who is also a native speaker of English and Hindi. And a good salesman even though his strength is chemical engineering which he studied at ETH Zürich.*

(Jennifer Khakshouri:) What do you hope you'll go home with.

(Punit Mehra:) Good new contacts new ideas. So also input from the people we meet. We have people from diverse industries here today. So I think the whole network behind it is always quite helpful. You learn a lot.

(Jennifer Khakshouri:) Did you just exchange business cards or how did you do it?

(Punit Mehra:) We generally exchange business cards. Take the contacts. And. Yeah. That's it. We keep in touch. We try. Let's see how much replies we get.

(Detlef Günther:) It's always all the spin offs report later on that they are greatly appreciated that we involve them into the industry day because it is 650 industrial partners. They all walk around interact and even the end - this was this year something new - even at the end nobody left immediately after five thirty they all stayed almost till 8 o'clock and longer and used the time to network reflect some of the ideas and all the reports later on and comments were very positive in particular from our spin off companies.

CHAPTER 4

(Jennifer Khakshouri:) *Chapter 4 - advancing*

(Jennifer Khakshouri:) *We meet Michela again, a few weeks after we talked to her for the first time. In the meantime, Haelixa underwent a big change, as a result of a new partnership with Zurcher Kantonalbank and with the Swiss chemical company Clariant as lead investor.*

(Michela Puddu:) We had quite a busy summer and the main event was that we closed our first investment round with Clariant as a strategic investor and for us this is a significant step. Opening up many opportunities our technology fits very well in several product categories and application of Clariant and therefore we are very excited of this collaboration and we believe will greatly contribute to the future success of the company.

(Jennifer Khakshouri:) *Wow, that's a dream come true for a start up! But the Haelixa team didn't have a lot of time to celebrate.*

(Michela Puddu:) Closing an investment round takes up quite some time from the management team. So we had to go finally back to business. And so all the projects that were temporarily parked or delayed had to take off again.

(Jennifer Khakshouri:) *Michela doesn't want to disclose the details of the new investment contract. But she says:*

(Michela Puddu:) It was a good learning then the negotiation of the deal per se.

(Jennifer Khakshouri:) *We meet Punit again, who I spoke to at the Industry Day. He tells me he detected a previously unknown side of his boss Michela when he went to sales meetings with her.*

(Punit Mehra:) I realized she's pretty tough. It's very difficult for anybody else to negotiate against her and she just has a plan and she goes straight through with it and is very tough on that but also very fair. If she thinks this is the best deal for the company for the people who work there she will fight for that.

(Jennifer Khakshouri:) *Punit is well aware of the challenges his bosses are encountering. One of those is putting a team together with people who really match.*

(Punit Mehra:) Who grows up and says Hey I'm going to manage a team of six people. It's not always easy. Every person is different. Every person needs different communication sometimes or different words to encourage or just a simple introduction. I think in these things you do see that there they need some learning. But I think it's a small minor thing.

(Michela Puddu:) we are learning how to do it better and it still for me the most difficult task to hire good people and once they are hired to make sure that they fit and that everybody is happy in the company and rewarded and the mood is high. And at the moment the vibes are very positive. I'm very happy of the current team.

(Jennifer Khakshouri:) *It seems in a start-up there is never a moment to relax. On one side to get more money is a relief, but it is also a new burden.*

(Michela Puddu:) The pressure comes from the fact that we have funding to reach some goals that we set and things that we promise and we need to hit that goals.

(Jennifer Khakshouri:) *Michela and her team of Haelixa managed the transition from the academic to the business world. But they have ONE big step to go.*

(Detlef Günther:) At the moment they try to explore some of these what we call a killer application to really make it into the market. I see actually that it has such a huge potential for all kinds of applications but to find the door this is at the moment really the key part.

(Jennifer Khakshouri:) And do you think they'll find the door?

(Detlef Günther:) Oh yeah. I'm 100 percent convinced they need a little bit more breath I think. The question is what kind of industry recognizes the potential first. And then it could be disruptive for a lot of things.

Outro

(Jennifer Khakshouri:) *There is just one thing I want to mention: Michela told me that she wanted to motivate everybody in her team to go running for instance as a group during a lunch break. Her thought behind it: Physical fitness is the ground of a fresh, productive mind. She herself trains and runs and swims on a regular basis. She even just started competing in triathlon. Could she motivate the people in her company as well?*

(Michela Puddu:) We don't manage to make them run all the time (laughs). Some are particularly resistant to run.

(Jennifer Khakshouri:) *Presumably Punit is one of them. I remember talking to him about this topic at the Industry Day.*

(Jennifer Khakshouri:) When you applied to work for Haelixa was it a topic if you are also a runner or not?

(Punit Mehra:) Yes, it was and I was honest about it. I said I'm not a good runner yet. But I can try. And we'll see...

(Jennifer Khakshouri:) *This is the podcast by ETH Zurich.*

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