Podcast Episode #1 - Introduction to the podcast, with your host, Balint Horvath, Switzerland

RAW TRANSCRIPT OF INTERVIEW

Balint: Hello ladies and gentlemen, üdvözöllek, the Hungarian and probably the more present non-Hungarian speaking global listeners. This is the very first episode of The Hardware Entrepreneur podcast and I'm glad to introduce...myself in this episode. I'm Balint Horvath, founder and host of this podcast, an entrepreneur originally from Hungary, and currently based in the heart of Europe, Switzerland. You might know this country as a well-known location for amazing, high-quality chocolate, but it's also a place where green is green regarding its pastures, mountains and where fresh innovations make this country as one of the top places for innovations.

Balint: In this very first episode I'd like to talk mainly about the why, why I'm doing this to you, this podcast. I'll tell you about my background as well, and the bigger picture on what I think about entrepreneurship, and finally I'll be closing off this episode with formalities, so what structure you can expect from this podcast.

Balint: To start off, you might have heard the famous quote "Software eats the world", by famous Silicon Valley investor Marc Andreessen. Really? Is that so? Our Earth, as far as I know, runs on resources and it's based more on atoms than on bits. I claim that our true progress on this planet depends on our producing, selling physical products, hardware, some of which might even hold the promise of fixing our planet. Hardware is IoT, Internet of Things, devices connected to the internet, or 3D printers, drones, robots which are all in today's headlines, and which also have a software element, they have software running on them. But they can also be any physical product, such as a sustainable pencil, which has apparently no software element, it's purely a physical product, hardware. Hardware is...different, different than pure software. Challenges are everywhere, in designing, manufacturing, getting funding, hiring, innovating, delivering to the customers. Resources in my eyes are scattered around on the internet in blogs, discussion forums or in a handful of recently published books, so I consider the total amount of information little. You might ask, where do you get real, practical knowledge? Well, either by going through building a hardware company yourself or by hearing it first-hand from hardware entrepreneurs what they have gone through.

Balint: This podcast is for you to learn directly from hardware entrepreneurs. So I started this podcast to bring you stories from hardware entrepreneurs, to show you how they started their companies and run these. How means what their motivation was, what hurdles they ran into, then overcame those in terms of funding, strategies, business models they iterated on, and tackling some of the topics mentioned related to manufacturing, innovation, hiring, and so on.

Balint: I regard myself as like you, listener, who wants to get answers in these topics, to see real examples. The world of hardware, as I mentioned it, is different from the world of software in many aspects. In contrast to software where there were a lot of activities, developments,in the 90s and onwards, hardware as a phenomenon is relatively new, with companies popping up literally everywhere in the world. This trend is being popularized by runaway successes of companies like Fitbit, GoPro, SpaceX, Tesla, Nest, and so on. Since it's an upward trend and as I mentioned, relatively new, there is a lack of stories, obviously by hardware entrepreneurs. If we had more of these case studies, I believe, there could be a healthier ecosystem, where we support each other to go forward.

Balint: Locally in the world, there are maker faires, maker spaces, conferences, meetups, to mention a few, which are hugely helpful for creating a healthy local ecosystem. I am also part of a few of these, such as the mini maker faire in Zurich, which has been organised this year, where I volunteered, and attending events in Europe or in Asia, for example in London Hardware Pioneers, in Hong Kong, the LaunchpadHK, Global Sources faire, which I find very useful. With my podcast I strive to contribute to raising awareness about hardware entrepreneurship as a trend, which is happening on a global scale, but also locally typically in urban hubs, for example in London, San Fransisco, New York, Shenzhen, just to mention a few, and hopefully with time also more geographically dispersed. I'd like to create a platform for voice. Hardware Entrepreneurship is global, lessons can be learned and shared between one another, and all of these can add to your toolbox.

Balint: There's one more thing to note about hardware, software and their connection. It's clearly hard to split the two fields, because actually we see a blending of the two fields, hardware and software. This is happening for example in IoT and also in Artificial Intelligence, AI where software is controlling cars or drones. This means that in this podcast software topics will also come up. However the main focus will always be hardware and hardware aspects.

Balint: Now the About section. So a little bit about me, about the host of this podcast. So you may ask, man, why did you start this podcast, besides the nice-sounding reasons? Well, my answer is that, I like podcast, I love podcasting, I think it's a great alternative medium for getting my information intake. I listen to such podcasts as HBR or Stuff You Should Know, The Tim Ferriss Show, Smart Passive Income, Nature, to name a few when I do the cleaning in the flat or I do the cooking, going jogging and so on. Then there was a point this summer, it was a sudden realization, my AHA moment, when browsing through different podcasts that actually there is none targeting people, hardware entrepreneurs who would like to found their companies based on producing physical products. So I asked myself, why not creating such a podcast myself if I need such information and if others, who I talked to, would need such know-how? Here I am for you, listener, with this first episode.

Balint: As for my roots, I come from Hungary, from its northern tip, from a dusty little town that had its heyday until the mining industry collapsed. Currently, I'm in Switzerland, in Zurich, which is everything but not dusty. So you may ask, how did I

get from point A to point B? To cut the story short, it was a circuitous path. At 12, so when I was 12, I decided to be a physicist, to explore the world of atoms, so how things work. I did get a PhD in Physics but via a non-obvious path, first I started with computer science then out of love to Electrical Engineering, then I switched to that field and I liked it very much, playing around with the oscilloscope, doing research in microwave photonics, writing papers, internationally publishing, even playing with the idea of founding a company which in the end didn't happen. I wanted to concentrate instead on getting my Master's, after which I enrolled into the physics program in Munich, still staying with photonics which I got to like, and this happened at a Max-Planck institute close to Munich, just outside, and voila, then I got my PhD, which I set as a goal when I was a child. One of the lessons learned through this is that, for me, if you set your mind on something and you live with that thought, with that mindset for an extended period of time, such thoughts get ingrained into your brain, into your mind, and through steps you don't know beforehand, you can get to your final goal. Following my PhD, I've had a career, an industrial career as senior member of research staff, and then as R&D program manager at two multinational companies in Switzerland. I quit my job, later, at a point to realize my dream of traveling the world, traveling solo, doing solo-backpacking, and also with my girlfriend when she joined me for 2 months. Now I'm an entrepreneur with a mission to help hardware entrepreneurs.

Balint: This brings us to the topic of Entrepreneurship, to the big picture which I mentioned at the beginning of this episode on what I think about entrepreneurship. We hear often these days the word "startup" in the media, of course, because they're disrupting industries worldwide. Now I used actually two buzzwords, startup and disrupt, the second word meaning many times these days to upset an industry. Entrepreneurship on the other hand is more widespread, significant than "just" disrupting via startups. Entrepreneurship means managing an enterprise, and organising it, by a person, with risk-taking and with initiative. What do you think the most entrepreneurial countries are in the world? Is it the USA, Switzerland or Finland? Well, according to the Global Entrepreneurship Monitor, Nr 1 is Uganda, 2nd is Thailand, then Brazil, Cameroon, Vietnam, the list continuing like this until we get to the 26th, Australia, which is the first developed country on the list. In Uganda, every fourth person, whereas in the US about 4% of the population, of the adults have a company. In Thailand and Vietnam I saw it first-hand, the entrepreneurship, how widespread it is, by smelling food around almost every corner, because they're selling food everywhere sold by entrepreneurs.

Balint: Entrepreneurship, I feel, should become more widespread also in the developed world and elsewhere and it's happening, as we see it, startups are making headlines in the news as mentioned and entry into the hardware world is being lowered by such innovations as 3D printing or accelerators that operate worldwide, crowd-funding and so on. In the spirit of the Global Entrepreneurship Monitor and considering the meaning of entrepreneur, entrepreneurship, instead of being mesmerized by the word startup which want to take over the world, we should keep our eyes open also for small and medium-sized enterprises. Many times they cannot, or they do not want to get big. This is why I considered the naming of my podcast

more appropriate to contain word entrepreneur. Bigger, for a company, does not necessarily mean better. Think about the VW Beetle ad, "Think Small" thereby challenging the status quo of the world of big cars, or the Apple ad, "Think different" where they challenged the status quo of IBM which had the slogan "think" and they challenged this way their business-model as well. Why not consider hardware more than just a movement about startups that want to go big? With this podcast I want to show examples also for SMEs, Small Medium-sized Enterprises, apart from startups, for companies that are owned sometimes even by families, who find success in hardware.

Balint: Another angle worth considering when talking about entrepreneurship and its significance with regard to creating a better place in the world, is that it is this field that points to the future of education. Hopefully, this will lead us to be better able to catch up with the exponential growth of technology that we experience. Educational innovators today are talking about 3rd generation and entrepreneurial universities. These are going to be hubs for innovation, where researchers connect with entrepreneurs and work together in a collaborative manner, and this way bringing innovations to the market, commercializing research results. Another initiative that is worth looking at is project-based learning. In this students or adults are given a project and they have to work towards the goal set in the project. This setting, this project-based learning setting is very effective because the theoretical knowledge that they pick up, gets translated almost immediately to practical, useful knowledge. This allows for a deeper learning. Such a project is typically done in a group-setting using the latest technologies. An example for project-based learning is the THINK Global School, where students travel around the world and they get immersed into projects. In hardware, maker faires are where students and adults display their work, similarly to a project-based school, and in hackathons they participate in a project-based activity to create products and to present these.

Balint: Now before closing off, here comes the formalities, so the format to expect. In each episode I'll interview hardware entrepreneurs, founders and leaders, for about half an hour, plus minus 15 mins. The beginning will be kind of freestyle, so I'll be asking questions related to the topic that the interviewee brings with him or her. Then a fixed set of questions will come, which will be called ultrafast round which means in this blog I'll ask similar questions in each episode. There might be also special guests or bonus episodes which also depends on you, on your feedback. So feedback is highly appreciated, it also helps me to come to you with answers to your pain points.

Balint: To wrap-up, I hope you, listener, are looking forward to the upcoming episodes. I believe in my mantra, which is "Everything is connected to everything" so hopefully I could show you how hardware entrepreneurship doesn't stand alone in space, but it connects with the bigger picture of entrepreneurship, and also with software which blends more and more together with hardware. Stay tuned for the episodes.