Podcast Episode #51 – Connecting the (hardware) dots, with Greg Fisher of BSG and Hardware Massive, USA

RAW TRANSCRIPT OF INTERVIEW

Balint: I'm talking to Greg Fisher, founder and CEO of the Berkeley Sourcing Group and the founder of the Hardware Massive. I'm glad to have you on the show finally, Greg.

Greg: Hi, Balint. Yeah, it's great to be here. Thanks for having me.

Balint: We got connected on LinkedIn and I saw the activities you were doing that we have similar goals regarding helping hardware entrepreneurs. Then we started to collaborate in a way and as a result my platform is on your platform which gets published regularly. I appreciate it.

Greg: Yeah, you have great content so it's great to have you there.

Balint: Thank you. I don't want to jump too much ahead though regarding you know the podcast and what you have on your platform but I'm quite excited to talk to you, to do the interview, to talk about hardware. So let me start out with a question. What was your first hardware project and what was the result, the outcome of it like success or it was a stepping stone for something bigger?

Greg: You know I think I'm a pretty typical entrepreneur. I've had crazy ideas since I was maybe ten years old and many of them were much too big for me to jump into. So I kind of kept developing various businesses. But really one of the first hardware products that we looked at getting into market was our first customer The Clean Bottle with Berkeley Sourcing Group and this was a very interesting lesson. It was a bottle that opens on both ends so it's easy to dry for cycling. And we worked with a very smart founder who had a really innovative way of marketing so he dressed up, he made a clean bottle costume and he went to the Tour de France and every day he would carry this costume up the hill and start running as the cyclists were about to you know ride by and so he had you know 20 plus days of international exposure, marketing for free and out of all the other marketing he did that was by far the most effective and it was a pretty good success. It's still in the market, it's still in most of the big sports stores today. So that was one of our first forays there.

Balint: It sounds like the early days of viral marketing.

Greg: Absolutely, yeah.

Balint: Yeah, getting on TV. Can you tell us about the Berkeley Sourcing Group? So what you're solving with the company and who typically approaches you?

Greg: Yes. I started here in China about 15 years ago and it was back when it was certainly a lot harder to navigate. And I started with a professional automotive tool company and I was working with 100 factories in China and Taiwan 7 trade companies and there were lots of issues, lots of quality control and communication and technical. And so, when we really started spending more and more time over here seeing those problems I saw opportunities to make a better system and also saw the growth in the startup abilities you know with the e-commerce and technologies that I expected would help startups to become more competitive. So I partnered with the trade company that I liked working the most with, it was most focused on quality control and transparency. And my partner he had already done you know maybe 2 to 3 billion dollars in business at that time. He had these huge factories of 10000 workers and all the factory relationships and had a very good system. So we plugged into his existing Infrastructure which allowed us to get up to speed very quickly. And then I worked focused on the startups in the U.S. market.

So our services really start from the…You know it's good for us to get connected early. We like to talk to our customers when they're still in the development phase because we can help maybe give them some ideas that they can get on the right path as far as the design for manufacturing process, you know, if you can understand what processes are available and what's cost effective. So we're happy to have conversations early but where we really start to do our work and take over the process is about the design for manufacturing step and then we do some preproduction, prototyping, tooling you know with innovative new products there's always a lot of troubleshooting and getting the manufacturing lines set up right. We work directly with the factories. We have a team here of 20-inch engine that it's engineers, project managers, quality control inspectors and management. So we were kind of the plug-and-play team on the ground here to work with the factory you know manufacturing and then quality control and shipping so the best startups and businesses for us to work with are really those that are ready to get it done and looking to scale.

Balint: Yeah. Just to add that I know you are in China now so you're really on the ground of manufacturing and not in the U.S. currently.

Greg: Yeah, I live here a third of the time and I've been doing that for about 15 years.

Balint: Yeah, that's good. All right. And what kind of companies turn to you? Is it going to be typically consumer product-oriented companies or also other companies, even maybe big companies?

Greg: Yeah, we do consumer and industrial. You know we do a little bit of medical as well. So we're pretty well versed in a wide variety of industries. We've worked with over a thousand companies in that time. So we have every standard process, injection molding, SMT - compression molding, cutting, so these are all things that we we've had you know dozens of projects with. And we also can do more specialty items as well so you know what I find is it's really…With the right factory and the right setup of the company and the customer, then it's not so much the technical part that often creates the most problems, it's the process of making sure that all the communication and the project management is correct and that all of the specifications are outlined, the tolerances you know really getting down to the details of how to produce. So yeah, we're pretty broad as it goes.

Balint: All right. Actually, the manufacturing aspect is it done exclusively in China or do you have some facilities also in the U.S.? Because you know I had an interview with Scott Miller of Dragon Innovation and we were discussing that for certain quantities under certain circumstances it could be interesting to have some manufacturing in the U.S. as opposed to China. What do you think about that?

Greg: Yeah, absolutely. So our value is really in China. We have partners in the U.S. so we are happy to connect our clients to. And there can definitely be situations where that makes the most sense. When you look at the numbers and understand your market I think it becomes pretty clear which path you need to go into. Basically, China labor is cheaper, there's great infrastructure, actually better infrastructure in many ways now than the U.S. for the manufacturing process, the suppliers of all the materials are here, the factories are typically very consolidated so the raw materials and the whole ecosystem is very close together here in Shenzhen, around Shanghai as well.

And I think the important thing to know is that you can get the product price down typically by going to China but there is a kind of a setup cost. You know you need to be able to communicate how to set up the production run, all the technical requirements, be very clear about the level of quality and doing that you know from a U.S. or European company and getting all that into the team here in China and working out you know troubleshooting the first manufacturing run you know it's a little bit harder because you can't just go down the street and set that up and there's cultural and language barriers that you need to overcome. So really, I think the balance is between that setup costs and the reduced product price.

And you know if you're looking to scale, it can be better to do that early and just get that set up costs kind of out of the way and then you're ready to go. If you're going a little bit slower and you won't have the revenue and need that price reduction so quickly, then I think you know pilot runs and getting started in your local environment can be the better direction.

Balint: You touched upon a couple of things like cost, the unit price, the setup and that could also have some cost repercussion. And what about the timeline? So if somebody has, let's say a product idea even like a CAD drawing, and then turns to you, what would be the timeline for, let's say, a simple product like the bottle with two ends, what would be the timeline for getting from a CAD drawing all the way to first production run? You also have to prototype stages but first production run… Actually, what would be the number of units produced? Would it be something like just a few 20 or production run I guess it should be 10000, right, or in that range - five to ten?

Greg: You know I've found working with us… We're set up well to work with smaller quantities so with BSG what I've found is usually the right time to move over when the order is about 10 000 dollars. So the number of units can be smaller or larger but you know there's at least a few thousand to put into getting things set up correctly so you need that financial kind of commitment for it to start to make sense. And really on the first order the supply chain is not making money and this is something I think startups really need to understand and appreciate that all of the supply chain is working hard to get out a good product and typically not you know just really trying to cover the costs and build their relationship for the long term.

For the timeline, it's funny that you mentioned the clean bottle because that seems like such a simple product but because it had holes on both ends there was no place for the machine to register, to cut the second hole because the machine, the standard machine for these molded bottles holds from the bottom and cuts from the top and so we actually had to completely innovate the process and build our own fixture and then find a new way to cut out the second hole. And so, things that can seem very simple can be very difficult. Things that seem very difficult, some electronics, can actually be very simple once you get the design right. So there's always these little details that come up and innovative products and that's really where the lead time can get hit.

I feel very happy with our team that we've typically been very fast to market but as a standard timeline by the time the engineering package is basically complete we will work on a preproduction prototype and this can… Usually, there's a few iterations as we modify and improve the design for map manufacturing, for cost reduction, for consistency and reaching the quality level, communicating with the customer and looking at slightly different options for tweaking things. So we're really trying to get the manufacturing set up right well in that preproduction prototype so that's typically about 30 days with discussion and approvals, some shipping samples to customers. Once that is looking good, tooling is about 30 to 45 days. Usually, you know most of our products involve some kind of plastic injection molding so injection molding tooling with our team is about 30 days including modifications. If you're looking at simpler tooling like compression molding or a lot of metal tools, that can get down to about

two weeks but then you also have the shipping time for approval if you know you're looking for those first articles so that's another five days or so. First production run, you know in that tooling time then if you feel confident with the design, you can place the orders for some of the components, especially you want to look at the high lead time electronic components if you're doing electronic product. Some of those lead times can be 10 to 12 weeks and more. And so, identifying those early can really help you get that total lead time down and placing orders for those early.

If all the components are ready, then the first production run is typically 30 to 45 days and you know kind of 30 days if things go well and often there are some trouble-shooting and improvement and so you'll need to tweak that a bit. And then quality control and you should give about two weeks extra on top of that because there are you know maybe the packaging is you know there is something that wanted to be changed in the packaging or it's always little things that kind of come up. So 45 days or so for a first production run and then if you're shipping on the water, that's a month for shipping. And then you also need to account you know if you're doing crowd funding, that you still need to receive the product, you want to inspect it and make sure that everybody's on the same page. And then at least do a sample inspection and then ship that out. So you know that if you do that quickly [16:06] a few days to a week. So, all in all, it's six months including ocean shipping is about as quickly as it can go if you have tooling. And, you know, it's good to plan for seven to nine months because it's always better to overachieve than be late.

Balint: Yeah. Okay. That's a pretty good rule of thumb to keep in mind. So, do you have some specific tips by the way for startups on how they can stay lean so with operating, with producing little waste and how to be agile, so responsive, during the development?

Greg: Yes. You know I think the biggest step I have is that I do it right the first time, that you know it's really hard to cut out time in a typical development process. You know industrial design and prototypes and these this process takes time and obviously working with the right partners who are experienced and can do things more quickly is helpful. But you know if you're 3D printing a part or you know building a board, there's a certain amount of time that there's going to be a little plus or minus on that but it's going to take that time.

But where most companies lose the most time is by having to do a second iteration you know or not foreseeing a particular problem and that can triple, quadruple your time in that development phase very quickly. So I think the most startups really look at the prototype from a product point of view and I would say the best advice I could give is take a step back and look at your development and your prototypes from a business purpose. What is… Think about every prototype and what are you going to put in. You're going to put in time and money and ideas, and what are you going to

get out of it? And depending on that you can make different kinds of prototypes and maybe you can make a really quick prototype to test the UI UX feature and maybe that can get you to that next step and then you can take a longer time to figure something else out. But if you try to do the whole thing and you haven't proven the UI UX part, then you have to do another month-long prototype to figure something out. So always align your development and your prototyping with your business cycle and if you can do that and hit your steps and your goals efficiently, then you can easily cut down your time to a quarter of doing it efficiently.

Balint: At the beginning I mentioned that you have another initiative, major initiative – The Hardware Massive platform. So I want to a little bit steer the conversation to this now. So can you tell us more about it, what this platform is about and how it was established?

Greg: Yes. Well, I was here in China and a good friend of mine called me up at 3:00 in the morning and he said, "Hey, Greg, the organizer for the Berkeley Hardware Startup Meetup group has stepped down and you should be the guy running that." And so, it's 3:00 in the morning, I just wanted to go back to sleep. Click, click, click, you know, I took over the organization of that and started doing these events in Berkeley and just you know really had a great response from the community that they liked what we were talking about and our experience and felt it was useful and so you know I'm traveling to Asia a lot.

So we started those meetup groups in Shenzhen, Hong Kong and Tokyo five years ago and you know at the time there was really no community meetups or events around that in these communities. And I found that really over here internationally there was a lot more value because you know in Berkeley and Silicon Valley a lot of the startup education and resources and network are already pretty well established. But in Shenzhen and Tokyo and these international communities it's a lot more value in bringing that. So as we started running these events we found that wow, there was really a gap in hardware startups in particular because it's been very seldom that startup companies have effectively competed in hardware. It takes so much time and resources and you know the team and the money. And so historically it hasn't been available for the most part until recently for you know a couple of founders to come up with an idea and execute that.

So there's really a gap in the resources and networking and education. And as we understood that got more and more we decided to really take the plunge and meet the meetup groups are great for meeting face-to-face but as soon as the events were over there was no good way for sharing education, for networking and answering you know the daily questions that hardware startups come up with. So we decided to go all in and create our own platform. So we created the Hardware Massive and the idea's very similar. It starts with the idea of somewhere to meet up is the value of

these face-to-face events and networking and building those real relationships. But then also plugging in the resources and the online presence that we have all the content and you know videos, podcasts, blogs, webinars, forum to allow the community to get connected, to learn things from experts that are specialized in hardware and to fill in the gaps that they need to succeed.

Balint: Yeah, I appreciate that. I love the people on the platform and there are also for discussions in forums people can ask questions there are articles. I think it's a great resource.

Greg: Yeah, thanks.

Balint: Another related topic that is like an outgrowth of Hardware Massive I believe or maybe it's the other way around because actually you mentioned it that Hardware Massive started out by organizing first offline events at Berkeley, Shenzhen, Hong Kong and Tokyo. So you have another big event HardwareCon. It's not a meetup style so it's not small, to my knowledge, but it's of a different scale. Can you tell us more about it? Because as far as I know there's one coming up. So it would be really great to hear more about that.

Greg: Yeah. It's right around the corner and we're taking a big step up the share. So HardwareCon came about Eric Katz a friend of mine, he put on Makers at the Mint with about 2000 makers four and a half years ago and we were chatting and talking about how there is no good hardware conference you know for hardware innovation.

And so, we decided that we should try to put something together and really make a big flagship event to get the whole hardware innovation ecosystem together. So we then partnered up with my partner Beth Brzezinski and we created HardwareCon the first of conference three years ago with very much it has the same exact mission as Hardware Massive to help empower hardware startups to be successful through education, networking and access to resources. But it's our flagship face-to-face event where we get the top leaders in the industry from the bigger business, you know IBM, Google, Intel, Panasonic, those guys that are driving innovation from the top and then the providers, so the manufacturers, developers, packaging, marketing, the folks kind of supporting the innovators during the work, the investors so they can raise money and then the startups obviously. So it's very much like Hardware Massive but it's kind of at a higher level in the top ecosystem of getting it all together.

And this year we're focused on hardware investment. So last year without that focus we had about 8 percent of our attendees were investors. And interesting thing is CB Insights just came out with a report and 75 percent of hardware startup investment in the entire world came from the San Francisco Bay Area last year. So it's pretty wild. So if you're looking to raise money for a hardware, it's definitely the place to be and

we're going to have all those guys at the show this year. So that's April 19 and 20 and it'll be at the San Jose Convention Center. So that's we're moving taking a big step up in the venue and it will be about 500 attendees, panels, breakout sessions, workshops, one-on-ones with investors and a pitch contest. So you check that out a lot at hardwarecon.com.

Balint: Yeah, it's pretty difficult to scale a business without money especially hardware so it's really interesting the focus that you have this year. I like it.

Greg: Yes. Always an exciting topic.

Balint: Yeah, yeah. Before we move on to the last round of questions, a question. What kind of question you wish like a podcaster like me or somebody in the hardware field you wish you asked to cover?

Greg: Oh, yeah. You know like in this talk you know really I think about the business you know we just did all these pitch contests and we saw about 80 different startups pitching and working with startups for a long time. The founders for hardware are very typically technical folks. And as technical people, I'm an engineer and we're very product focused and we like to have great features and make the best product and that's very important, you know it's an important baseline. But what makes the business successful only five percent of it is really going to be the product at the end of the day. It's going to be your partnerships, your price point, your margins, your distribution channels, your product market fit. So I would say remember that in order to survive and scale it's all about the business. And then you need to know how that product fits in the business but you need to be looking at those other things cash flow and raising money. And so I would say take a step back and see, really try to understand where that business is going to be and where it's going in three years in order, what's the big picture of how are you going to get there.

Balint: Yeah, this is also one of the reasons why I started this podcast because the business aspect is very important. It's many times underestimated, technical founders concentrate too much on the technical aspects. They have a deep dive into the topic because this is where they also feel comfortable. But in the end even a simple technical idea can have a really, really big success. You know the bottle, again, it sounds complicated that we talked about in this episode how it was manufactured but compared to an AI-driven you know or self-driving car the technical complexity of that is much lower.

Greg: Certainly. Yeah. And you know most of the products that are sold you know in industrial and consumer and you know they're often not that technically challenging, they just have a good fit and everything else kind of worked out well and there are

margins and there are customers and they got distributed in the right way. And yes, simplifying can certainly help sometimes.

Balint: Yeah. So the last round of questions. Are you ready?

Greg: I'm ready.

Balint: So that means that I'm going to ask four questions that it'd be great to get the relatively short answers to these. This is the ultrafast round of questions. If you could go back in time to the time when you were in your 20s, what notes would you give yourself?

Greg: I would tell myself to surround myself with experts you know give up the equity, build a good team. I've always had big ideas and it was a bit too much to swallow and I would have been better off learning from people who've done it before.

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

Greg: Yes, *The Essential Peter Drucker*. My favorite business writer.

Balint: Yeah, I also like his work. Yeah, actually I think that's the one I also read where…No, maybe it was the *60 Years of Peter Drucker* there's another one which summarizes his work because he wrote many, many books. Yeah, he's amazing. I think he's like a [29:08] so he was well versed in different areas.

Greg: Yeah. He has a unique perspective and he really gets to I think the executable point which is…Yeah, I really like it.

Balint: Yeah. The third question. I'm amazed by habits and what positive effect these can have on our life, private and professional life. Do you have some routine?

Greg: You know I don't have kind of this new age value of a lot of the folks that that other…Routines that other people have. Coffee for me I'm useless without coffee. Actually, the one thing I do try to do that has helped a lot is you know quote unquote eat the frog which is that thing that I really need to get done today that I really don't want to do. You know maybe it's working on the financial plan or it's probably going to be this kind of business focus that we're talking about for a lot of startups but you know that stuff that you don't like to do that's the most important and I try to make sure that I plan my day and either do that early or make sure at least I have the time that I'm going to get that done during that day.

Balint: So you follow the eat the frog.

Greg: So I think about that in the beginning.

Balint: Yeah. So you concentrate on the eat-the-frog policy in a way guideline.

Greg: Yeah.

Balint: The fourth question. In your work if you had to pick a few cultural differences because you work in China, you work in the U.S. and you move around globally which one, which difference, which cultural difference you wish you knew about and how did you overcome that?

Greg: You know it's really funny, and I'm going to turn this question around a little bit, there's a ton of cultural differences and you could go on for a long, long time about the details of what those are. But I actually think that most people get caught up too much in the cultural differences and the business is business at the end of the day. And if you get caught up too much that maybe you are misunderstanding you know fundamentally be nice, be thorough, be detailed, and that works very well in every culture. You know there are certain basic things that work well in every culture. But if you start to be too… If you start to play too much on the other culture's strength you know, "Hey, because the Chinese do it this way or the Japanese do it this way", you know if your partners aren't willing to accept that you are culturally different, then they're probably not the right partners and you don't want to move too much out of your strength. You know if you're moving away from what you're used to and accustomed to, then you're playing into the hands of other cultures and oftentimes that cultural difference is used against you in the negotiating power. And there's some great stories out there about that.

But you know I've found typically good business people are… They do some just fundamental things that work in every culture and you know you don't want to give up too much of your own culture and you definitely want to learn, right, you want to learn and in some cultures like Japan it's much more important. But you'll get there and you just keep learning and you'll figure it out. But I think overall the cultural difference is overemphasized in business.

Balint: Yeah, I think it's good to be aware of some of the cultural differences. But adjusting yourself so that you pick up those cultural traits might not pay off very, very well in some cases at least because for example if somebody has, like expects in their culture that you're going to ask what's the weather like or asking such formalities which are just completely formalities, then I think it could look awkward that you start adopting that culture because your language is different, if you talk English, and it can be awkward. At least I had some conversation like this with some Japanese people where there are formalities. I mean you also mentioned it now and I think at least in the eyes of Japanese I think it could look awkward. But if the listener doesn't agree, I think I would be glad to hear about that in the comments field on the website.

Greg: It's a great topic. And yeah, I definitely agree. I think one thing is you should never assume that you can you know as a Westerner you will never be Japanese, you'll never be Chinese and as fluent as you can become in the language you know there's a whole history and culture behind that that we will never understand and vice versa. And so you have to give that up pretty early.

I guess the other piece of advice I would give or give out would be if you really want to get things done in a culture that is very different than yours, find a partner early, spend the time to make sure that you can trust them and work with them and that you're aligned but that's really I think how you overcome the cultural differences as you find the right partner that you can work very closely with, he can represent you in that culture, and then you figure out how to work with that person and then they can translate that into the other culture.

Balint: To conclude this interview, what would be some details about your contact? So contact details. How can a listener reach you?

Greg: Yeah, well LinkedIn certainly, Greg Fisher, that's pretty easy to find on LinkedIn. Also, through Hardware Massive, so you can follow me on Hardware Massive I'm pretty good about following everybody back and then we can communicate there. So if you search me on either of those platforms, I'm always happy to help.

Balint: Excellent. So I appreciate this interview, Greg, and all the best for organizing the HardwareCon which is going to be tons of work I guess, a lot of frogs to eat.

Greg: It's yes, some frogs, put a little spicy sauce and it all goes down alright.

Balint: Exactly. All right. Thank you.

Greg: Thanks Balint, really appreciate it.