

# Transcript: Howe I Built This – DisabilityTech Entrepreneurs of Boston

**Sandy Lacey:** Thank you all so much for being here tonight. So, quick background, my name is Sandy Lacey, I'm the Director of the Howe Innovation Center at Perkins School for the Blind. We launched this year, so we basically had Year Zero, which was a lot of research and understanding what was happening at the intersection of innovation, entrepreneurship and disability, and in March of this year, we basically said "hello world, we are here" and what we really want to do is connect the disabled community with the innovation community, that's our main focus. You can find more about us by going to [perkins.org/innovationcenter](http://perkins.org/innovationcenter), and there will also be a link at the end of this event, but I just wanted to thank our hosts at the A11Y Boston Meetup for having us, and I'm gonna kick us off into a panel discussion, so we have three excellent entrepreneurs from the Boston tech ecosystem that are working in disability and accessibility, and I'm actually going to ask the first question and then pass it around, which is can you introduce yourself and your company and explain how your product contributes to increasing accessibility for people with disabilities. And I'm going to ask Samantha to go first because it is Deafblindness Awareness Month, so Samantha, you get to kick us off.

Can you hear me alright? Perfect. OK.

**Samantha Johnson:** Thank you so much for having me, thank you for highlighting Deafblindness Awareness Month, our favorite month here at Tatum Robotics, I am the founder of Tatum Robotics and we are developing assistive communication tools for people with deafblindness. Deafblind peoples' main method of communication tends to be tactile sign, when they're having conversation with interpreters they typically hold onto the hand of their communication partner and as a result they can't tend to do this independently, so we're developing the first tool that will connect to mainstream communication tools whether that be computers, emails, eBooks so that they can access communication independently.

**Sandy:** Fantastic. OK, Brittany, let's go over to you next.

**Brittany Ponder:** Hi, my name is Brittany Ponder, I'm the Founder and CEO of Beyondr, and we are revolutionizing the way people travel and experience the world with live and interactive virtual travel platforms. Guests can come in and take tours with our guides who are in almost sixty countries, and take a tour as if they were there in person via a tablet or their computer in real time, and see the sites of Venice or explore

Uganda. We are primarily B2B, but we work with senior groups, people that have disabilities, limited mobility and other conditions that prevent or inhibit travel, and kind of everything in between. So yeah we're really excited to be here today, thanks Sandy.

**Sandy:** Alright Alex take us away.

**Alex Westner:** Hi I'm Alex Westner, I'm the co-founder of Zander. We are looking at hearing loss, and when we get into hearing loss we see that there are hundreds of hearing devices to help people hear better, but they often fall short. Using a concept called sensory substitution, which I think we all need to use sometimes within accessibility, we're using augmented reality to supplement hearing loss so that if I put these glasses on when I'm having a conversation, they'll take the speech of whoever's talking to me, transcribe them into text, and display them right out here in my field of view. So as you're talking to me, I'll actually get real time captions of conversations, and that is what we're up to. And these are the glasses.

**Sandy:** So cool, so cool. Alright, I'm gonna go back to Sam and ask what motivated you to start working on a product that addresses accessibility challenges? Was there a personal experience or a specific incident that inspired you to step into this field?

**Samantha:** Yes, so I actually went to college because I wanted to pursue assistive technology. Growing up, I was involved in Unified Sports and having communication with my special needs peers and education, and when I went to college it was something I was prioritizing in my studies, but it actually wasn't until I met a person with Deafblindness that I was inspired to move into that very niche space. So I had taken some ASL classes during my undergraduate, and met a deafblind woman around campus, and I began chatting with her through an interpreter, and was fascinated by how much communication she could receive through tactile signing, and I asked how she communicated independently within her home, and she told me that if she was at home alone, she couldn't read a book, she couldn't call friends, because she didn't know Braille, she had no vision to read large print, and it wasn't until COVID when articles started coming out about Deafblind people crawling through the streets and crawling through buildings because they had no access to information that I actually got involved with that community. When I met the woman, I learned about the Boston Deafblind Contact Center that she was a part of, and I got their information and kind of kept up with their events, and once COVID hit I reached out and asked if there was any way I could help them, if there was anything I could make. And we started collaborating on a device for communication for them. So it became a very collaborative effort, and it was something that has been really inspiring along the way, starting with with just the Boston Deafblind community, now growing to the Connecticut Deafblind community, we were just at the Helen Keller National VCenter last week to really see how this tool

could really help the greater Deafblind community.

**Sandy:** Can you talk a little bit about the market sizing of your community?

**Samantha:** Yeah, so Deafblindness is really on a wide scale as a lot of disabilities are, so there are people with profound deafness and blindness, and there are people with low vision and low hearing, and they say that globally there's about 150 million people worldwide with Deafblindness. In the US, those obviously vary, but they say there's anywhere from hundreds of thousands to 2 million Deafblind people in the US. The numbers are quite underreported, as with many disabilities, but it's something that we're actually working on now Helen Keller Center to really try and understand what those statistics are, and really what they mean for the technology needed to support them – are they Deafblind in a way that they need large print, or are they Deafblind in a way that they need tactile signing support, and really trying to understand what that landscape looks like. About h

**Sandy:** Absolutely. Why don't we go to – I'm gonna switch it up, Alex, why don't we go to you next, and kinda talk about what motivated you to get into this space?

**Alex:** Yeah, so it was not a predictable path, but my whole career was in audio technology and sound, and working with teams to analyze sound and process speech and noise, but what really got me started was a personal experience. I was diagnosed with a form of macular degeneration – it's very mild and I do pretty well, but as an audio person I'm always thinking "oh my gosh, am I gonna be relying on sound and audio? Is that really gonna be my thing? Is that why I'm in sound?" So I started as an entrepreneur researching product ideas, and what I learned is, well, there's a lot of people working on that. As a human, it's great for me and other people like me, but as an entrepreneur I just had nothing else to add, but I was really interested in this idea of sensory substitution. My wife and I, who is actually a cofounder in this company, Marilyn, we just started looking at hearing loss instead, and learning about hearing loss and learning about this idea of using AR smart glasses as a visual substitute for when you can't hear. We started putting prototypes together, we started talking to people and it was just an instant hit, I could go on and on about why, but yeah, it was really just an instant success there. As far as market sizing, I mean it's good news and bad news as an entrepreneur which is in the US alone, there's almost 50 million people with hearing loss, the WHO is now estimating one and a half billion people worldwide with hearing loss, which is just astounding, and so, for better or for worse, there are tons of people who need these kinds of technologies that we're all looking at.

**Sandy:** Yeah, alright. Brittney, you're next.

**Brittany:** Yeah, so I was born with a disability, I'm missing both my arms from below the elbow, so I grew up always adapting and making sure I could do everything myself. But I do love to travel, sometimes it has its difficulties, and I do have some joint issues with my knees that make it difficult to walk long distances without being in a lot of pain. I also have experience as a caregiver. So I knew what it was like to really not be able to travel, or to care for someone that had limited ability to go places, and when COVID shut everything down and no one could travel, I thought, when I saw little things about virtual travel coming out, I thought "wow, everyone needs to be able to see this and experience the world and different cultures, and be able to get to see places they might not get to see in person". And so I started the marketplace for that to really provide equal access and inclusiveness to the travel industry. In terms of market size, just in the US, there are 40 million people with limited mobility or other conditions that prevent or inhibit travel. Sometimes you just think of people with physical limitations, but there are people with agoraphobia and a fear of flying, and there are many Baby Boomers, like 32 percent of them say that health concerns limit travel, and so there's such a huge number of people that have a limited ability to travel, and I really want to help those people see the world.

**Sandy:** Opening up the doors, I love it. Alright, so you know, a lot of times at Perkins we get inbound inquiries from student groups, entrepreneurs, even Fortune 100 companies asking for access to people in our community, either for primary market research or for user testing, and I'm curious if you could each talk to how you involve people with disabilities in the design and development process of your product. What stage of the process do you bring them in, and how important is the feedback when you're shaping your business. So I'm gonna switch it up again, I'm gonna go to Alex first. I'm just trying to keep you all on your toes. (Laughs)

**Alex:** Umm, yeah, so we are very customer – I don't know what the right word is – influenced? Everything we do has to be around the customer, I mean it's so hard. There's a quote I like from a thought leader which is "life's too short to build a product that nobody wants", and I think the way you do that is just by living with the customer. You can't just test something a year after you've developed it, you really need to inhabit and live with the customer's problems, and their pains and their solutions. And they don't always know what they want or what's gonna help them, that's our job, so at stage one, even before you have an idea you can spend more time with that customer. You really need to love the customer that you have, you just have to. if you're finding yourself annoyed by your customers, you're in the wrong job, you're in the wrong field – do something else. So I think even as you're coming up with a concept for a product, your idea will only be refined the deeper that you learn about customers' goals and problems, what they're trying to do, what they can't do, so I just think you have nothing if you're not really embodying your customer's everyday in your design and your thinking. Also, a lot of people are focusing on the product, but I think in our space we also have

to think about the business model and the pricing and the access and the distribution. That can often be as challenging or more challenging than actually building the solution, because how do you actually get it to people? How do you get it to someone in a way that they can afford it, and is there even enough margin in there that you can do all of that and still keep the lights on in your company? And that's where a lot of the problem is. I answered the customer's question, I know that there was another one.

**Sandy:** No, that's all, but I'm curious: how have you gone about finding people with hearing loss. I didn't ask that, I'm just piggybacking off what you said.

**Alex:** I think for us, hearing loss is so common, but it's something nobody talks about unless you start talking about it. And what we learned is, once you start talking about it – “oh my mom has hearing loss, oh my dad has hearing loss, he doesn't have a hearing aid”. Once you start talking to people, you can start meeting up with them and testing nearby. And the way we started, it was a month before COVID lockdown, we just did phone calls, Zoom calls and texts whenever we could to find people to talk to. But it actually wasn't as hard as we thought it might be, because people are out there if you just try reaching them. I think where we started getting more people was when we started connecting with people who are more actively involved in an organization – there's the Hearing Loss Association of America, there's local chapters, so we had the fortune of being introduced to the President of the Boston chapter, and she is also a tech skeptic, so she was one of our first interviewees and we thought she didn't like the product at all. We saw her for 45 minutes and we thought she just wasn't impressed, but we got an email from her 2 hours later saying “Alex, you know normally in an hour long conversation I'd be with a headache, destroyed because it takes so much energy, but when I was wearing your glasses I feel fine “. It was a lot easier to have that conversation, and she said “that's when I felt there was something there”. So I think it's really the networking, but then it's starting to get lucky and finding the influencers who will start to get excited about what you're doing and bring more people in for you. So you see that's really where you get that multiplier.

**Sandy:** Ok, Brittany, how about you?

**Brittany:** Yeah, so I'm kind of part of my target market, but I'm only one of many, so one of the first things I actually did was develop a survey, and I used Survey Monkey, a paid version of it, to send out surveys to people using their surveys, with the initial question of “do you have limitations that prevent you from traveling?” And so I was able to get information if they wanted to share it, about what prevented them from traveling and what their interest level is in a number of things I was considering. That was extremely helpful because it also made me see things that I wasn't even thinking about, like (unidentifiable, 17:00) can't leave their seat so they can't travel, so there's lots of

different angles. People with agoraphobia hadn't even thought of that when I started out, so lots of things I learned from their responses there. And then I hired a design firm to help me. I already had thoughts on how I wanted it to look, but they helped me refine the design using Figma-type mock ups, and doing user interviews. We used a company called UserInterviews.com and we used them again a few months ago when we were releasing something new, and we can dictate who you want – the types of people you want to interview and go through them, and shoot many different characteristics and that was so helpful to be able to see that and be able to get feedback directly from them. We also eventually hired a product manager who helps me keep track of all things related to the product. He is constantly reviewing the website and talking to current customers and potential customers with our salespeople, he sits in on calls and asks them various questions about what they're looking for, and of course we also rely on the reviews of the tours we have, and other things to kind of refine what we're doing and how we go about it, or the different things that people are looking for. So all of that has been really helpful for us, and you have to be able to talk to your customers if you wanna design something that they're gonna use.

**Sandy:** Yeah, really helpful suggestions in there too. And just the fact that you started listening, you started doing market research, a lot of folks skip that step, you know they have the idea, they have the solution to the problem without really understanding the problem at first, so, really fascinating. Ok, Samantha, you're next.

**Samantha:** We, naturally at the idea, were partnered with the Deafblind Contact Center in Boston from the beginning, so we were definitely working with the deafblind Contact center from the beginning. And we, I think all three companies, started in the COVID era, which definitely did make it quite tricky, especially with Deafblind folks who can't access communication outside those in person interviews. So we spent a lot of times in those early days relying on advocates and family members to communicate with the global deafblind community, and we did spend that first year only talking to deafblind people in Boston, which was great, but as we all know about design for people with disabilities, if you design for one person it will help that one person. So that's something that we're now trying to really expand on who we're talking to, and really talk to people with various disabilities, when they became Deafblind, the different times where they learned to sign, and really trying to understand how that would vary the needs of our device. And it's actually been a really fun design challenge because nothing has really been designed for Deafblind people before, so even maybe simple questions like how do we tell them where to put their hand on the device, we have to ask really obvious questions and design all these prototypes – and thank goodness for 3D printers and low-cost manufacturing, we can really have a lot of options when we get to be in the room with Deafblind people. And I think similarly to what Alex said – you can't just design this super awesome \$30,000 robot because it won't actually help anyone at that

point if you create technology that fits potential boxes but isn't accessible, you won't actually be helping anybody. So we've spent a good amount of time talking to the buyers – the deafblind people themselves for the most part won't be the buyers in our case, but it'll be programs like iCanConnect or it could be school systems, those are the people who need to understand what those processes look like to make sure that it falls into their budgets, and to make sure it would be helpful for the Deafblind people that we're walking with. So it's been something that we have, you know have become – from the time that I was an elementary signer, I am now a proficient signer, so I can communicate with all of our potential users, and it has been such a fun experience working with such a historically underserved community that really does show that excitement, that something we're developing could really be helpful in their everyday.

**Sandy:** Sam, you did an excellent segue into my next question, which is all about balancing affordability and accessibility. So we're all building products to unlock access to something, whether that's communication or travel and cultural immersion essentially, and you know, assistive technology, specifically hardware tends to come with a very very high price tag, and this has been a thorn for the assistive tech community for a very long time, and I'm curious you know, we've seen a lot of great innovation in this space, I've seen a lot of products be priced at a more accessible price points as more programs have been developed or entrepreneurs have gotten savvier around different types of business models. I would love to hear how particularly the two of you that have a product that is a physical product how you're addressing this challenge as you grow your companies. And Brittany, you're free to weigh in if you have something to weigh in too. Alex, you wanna go first?

**Alex:** Yeah, so it is a little disappointing, you know, you have a great solution and sometimes these costs are really out of my control, it's not like we're marking up products because we're greedy capitalists, it's just hardware. When you're building something new especially, you don't have volume, you don't have the volume you need to scale and get the pricing down, and when it's now sometimes the technology is new, sometimes the parts you're sourcing, and with AR glasses, they've been around for 10 years but they're still relatively new, they're still expensive and for good reason, and a lot of it has to do with the optics. But I think what we're starting to do is try to make the best product and find ways to get people to pay for it. I think we started to feel like as we looked at ways to bring the cost of the product down, we were starting to compromise too much on the experience, the quality and the benefit, and I think starting out as a first product, I think we want to put our best foot forward, make the best product we can and if it's expensive, you know, that limits the number of people who will pay for it using their own means, and we are starting to look into you know, how can we help people pay? What programs are available from the government, from non profits, from employers, we're doing a lot of research now with employer accommodations and we're finding that

yeah, employers are happy to and legally obligated to purchase these kinds of accommodations for their employees. So I think we're now learning now more about how do we help our customers pay for our more expensive product as a short term, long term we are looking for ways to reduce cost, with different design ideas, but for the short term we're trying to make the best product and figure out ways to help people pay for it.

**Sandy:** Yeah, and Alex that's a great point, you don't get a second chance at a first impression right, so you want the product to provide enough value that the initial customer is going to be excited about it and amplifying the message, so not compromising that quality is incredibly important. You know, I recently learned to get an advanced calculus textbook, like a college-level calculus textbook in Braille, it can take a year and a half to get printed and cost 35 thousand dollars, and when you, you know, there's a mechanism to offset the price to that book, but if a Braille tablet is 10 thousand dollars and any book can be piped into it using electronic Braille, different story, right?. So, we're all going to have to think creatively and collaboratively in this ecosystem to make sure that these technologies, advanced technologies can get out there, so that we can see those prices go down, so that we can potentially avoid the old way we've been doing things which might not be very cost efficient or effective either. Britney or Sam, do you have anything to add on the affordability side?

**Samantha:** Yeah I'll jump in. I think we definitely had a similar experience to Alex's. The first thing when we were designing is that we were trying to make a very low cost product, and slowly but surely we realized it didn't work. We know it can be super low cost but if it doesn't do anything, it, again, is just not helpful. What we decided to do is when we kind of created our design requirements at first, the first thing you do when (unidentified - 27:00) is make a list of all the things this thing needs to do. We really started prioritizing them, so maybe you know it might be heavier weight because we have to use bigger motors, it can still be lower cost because we're using these bulkier motors, something like that. Seeing what kind of off the shelf components we can use, again, maybe it's not as fast as it can possibly be, but it can still be within a certain price point, so I think that was one of the main ways that we did try to cut costs as much as possible is by using as much off the shelf as we can, again using low cost manufacturing methods, and I think the big thing especially with hardware companies, it's not even at the end of the day how much the product costs, but you have to put a lot of money into it, and I think that's why a lot of companies, it's really hard to form a hardware company in assistive tech because you can't get those big early checks that you can get from (unidentified) for assistive technology but you need that to build hardware, you know like, buying, you have to buy all these 3D printers if you need to 3d print something, that might be low cost but you have to buy all the equipment, and I think often that's why we see a lot of assistive technology in academia because they have those resources for you, but it makes it really hard for that transition outside of



academia, because you're on your own and you need to put up some early frontage costs. So I think that having more of an ecosystem like this can be a little more, there can be some community around it, you can share some of those resources, but I also think having some of those early interviews where you talk to some of these programs saying these are the price points that they need to fall into was a really helpful conversation for us because we realize it has to cost this much, you know, we were able to really work around backwards from that number in a lot of ways, and then if it didn't work, we would have to have some bigger conversations about what it means to be compromised or what can be compromised, if it's not possible why is it not, and what can we reevaluate. So I think there's a lot that goes into the pricing of hardware and hopefully it's one of those things that at the end of the day, everything can be optimized so you can create a really effective product and set a price point so people can afford to purchase it. But I do agree with Alex, that I think people do expect when you create assistive technology, they expect you to sell it for pennies because you're helping people, but at the end of the day there's a lot more than pennies in it, so you kind of create a little bit of a juxtaposition.

**Sandy:** Right, yeah, absolutely. Brittany, anything to add?

**Brittany:** Yeah I mean, we're more like an online services type company in terms of the tours being virtual, but we still had a cost to contend with because guides need to get paid for their time and we have to be competitive, very competitive with in person tours because all of our guides do in person tours. I want to make sure that they are more than willing to drop what they're doing and do tours for our customers, and part of the way we do that is making the price point for the tours very positive for the bank. But by doing that, we had to make sure that our customers could afford it. We started out with senior living groups, we did so much price changing and modification and talking to groups and figuring out what we needed to do, and ultimately we sort of decided that B2B was the way to go on our end, so we put the onus on the organization and the companies to pay for it and make it worth their while in terms of the benefits that their members get or their employees get, and then we developed a special program because all of our tours are private, and there's a minimum price point we developed for a special program for individuals and organizations for seniors and people with disabilities to join, and they take tours together. It's at a reduced cost individually but they all join on the same tour so the tour guides get the same amount of money, but the groups that really can't afford to pay more don't have to. And it's still a lot of messing with pricing and evaluating it and determining the best price points, it's so difficult.

**Sandy:** It is, it is. There's whole classes on this and MBA programs on, like, the science of pricing, and I think in this specific case, we have a lot of price sensitive customers in the disability community and in the aging community as well, so we really have to, you

know, you've all spoke n so eloquently to how constructively we have to think about this as we build companies and products in this space. I have one more question that I wanna ask, and we should have 10-15 minutes of Q and A from the audience. My question is really around other entrepreneurs, so what advice or encouragement would you give to aspiring entrepreneurs who are interested in developing products that enhance accessibility for people with disabilities. So I don't think I've had Brittany go first so I'm going to pass it over to Brittany.

**Brittany:** OK, so i think building your network at the beginning and talking to as many people as possible about your idea and trying to () and going back to the drawing board and not being afraid to say "this isn't working, let's do something else" if you're not getting, if you're consistently not getting the feedback that you think you should be getting. The user aspect that we talked about earlier, I think is so important, and if a lot of us fundraise. If you are fundraising, trying to create your ecosystem of people and looking at your resources is so important in the early stages.

I couldn't agree more. We could have a whole other how I built this on fundraising probably, which maybe, maybe we will do that. Sam, do you wanna go next?

**Samantha:** Yeah, absolutely and I think Brittany definitely hit the nail in the head of just make sure you're making something that people want, you know I think a ,lot of creating disability tech can be controversial sometimes, especially myself as a hearing, sighted engineer going into a deafblind space, that can be controversial, so make sure what you're doing is coming out of the community, it's not something that you're pushing technology onto other people, you had this really cool idea and are pushing it onto people who maybe don't need or don't don't want the technology. It's really, as Britney mentioned, have those interviews, make sure that this community is coming out of their needs and their wants and it's something you're developing in that bubble with them, not outside of it. And I think it's one of those things that at the end of the day, we're also really making =really cool technology, so I think that although we're sitting in this disability space, there are also a lot of resources for companies making really cool technology, most of them that we've forgotten so far isn't actually because we're creating disability tech, it's because we are just creating a deep technology and there's resources and grants for things like that. So I think taking your technology forward, it's in that use space, but also extrapolating it a little bit and seeing what kind of resources can come from that. Right now we sit in an incubator for robotics, which comes with its own resources and community despite us being an assistive technology company, and that's where our core focus is and that's where our priority is, we can build a community in the robotics space. So really finding out what kinds of homes you can sit in as an entrepreneur in that space.

**Sandy:** Yeah, it's so not a silo, I mean this market of disability tech overlaps with so many other markets whether it's AI or deep tech or inclusive technology, I mean there's really just, age t4ech, there's so many different overlaps so it's really cool to hear that you are leveraging an already established space sound the technology sector that you're in. Maybe not the audience sector that you're in which is really cool. Alex go ahead, why don't you wrap us up?

**Alex:** You bet. Definitely yes, plus one to Brittany and Samantha's comments, I think, you know, when you're getting to know your customers and spending time with them. I think what's really helpful is to understand the solutions that they use now. So we talk about getting to understand our customers, understand that their problems are, but spend just as much time figuring out what they do now, how do they solve this problem today, and understand how those products work and how those solutions work and what are the shortcomings of those, because our job is actually to make a better version of what they're already trying to do and it's not good enough. And so you also have to educate yourself on that kind of, I don't know, system of different solutions that people use, and sometimes a solution isn't a type of product, it's a behavior and that's really interesting.

**Sandy:** Right, it might be an avoidance behavior like "I just don't go to this specific place because I can't communicate in this specific environment", or it might be a relationship with someone, there's so many different workarounds that people develop in order to continue accessing the world. This has been awesome, I have a slide, so Derek I don't know if I have sharing capabilities, I'mn gonna see if I can, I think I can share this so i think I took over sorry, uhh, but I really just, I wanted to share this one slide here which basically has our contact information on it, so it has Brittany's email address, Samantha's email address and Alex's, all the URLs are the end of their emails, there's a QR code also on the right side which brings you to the Howe Innovation Center community signup, or you could go to [perkins.org/innovation](https://perkins.org/innovation), and me and my team can be reached at [innovation@perkins.org](mailto:innovation@perkins.org) don't worry, it goes directly to my inbox. Umm, and yeah, so if you wanna use this QR code to join our community we'd love to have you, it lets you access computer visualizations of the database we built which has about 750 companies in the disability tech space, and we're working on market sizing and market mapping and really trying to understand where the activity is happening within investments and innovation in the space of products for people with disabilities, so if you use this QR code to join it will then bring you to the database, which is pretty coo. But we'd love to open it up to questions from the audience, so if anybody who has joined us tonight has a question for the Entrepreneurson the panel we would be happy to answer it. Feel free to either unmute yourself or put it in the chat.

**Derek:** Actually, while we're waiting, I have a question but while we're waiting I'd like to

read these emails and names for the transcript (please do) so Brittany Palmer who is from tatum Robotics is at [brittany@beyonder.com](mailto:brittany@beyonder.com) (Brittany's at Beyonder, Samantha's at Tatum Robotics), oh I'm sorry, I'm sorry, we're gonna cut that, its Britney Palmer at [brittany@beeyonder.com](mailto:brittany@beeyonder.com), and then Samantha Johnson from Tatum Robotics is [sjohnson@tatumrobotics.com](mailto:sjohnson@tatumrobotics.com), and finally Alex Wesatner who is with Xander that's [alex@xander.tech](mailto:alex@xander.tech), and then of course the Howe Innovation Center is [innovation@perkins.org](mailto:innovation@perkins.org). That was a while but I just wanted to make sure we had it in the transcript, and Sandy, you're muted.

**Sandy:** I had to stop the share to unmute myself but I think we got it all in there anyway, but I appreciate that, thank you very much because it allows everyone on the call to know how to contact us, and we do have a question but Derek, you said you had a question first do you want to kick us off?

**Derek:** Sure, so I work in education right now but I didn't always, and one of the arguments we always had to make in the private sector was that you should also make things accessible because kind of, you're leaving a lot of money on the table, there's this whole community of people who could be using what you have but can't, and I wonder if when you're developing these products if you have a hard time finding people who will invest and understand that they're consumers like anyone else. Has that been something that's made it difficult or is there a particular group of people who understand this, or have you had to address this sort of issue with the investors I guess, the people who are gonna invest in the product?

**Alex:** I'll jump in, that was very, yeah it's really hard, I guess i learned when I first started pitching our company to investors I, as you do, you talk about the customer, you talk about the problem, and what I learned is, as soon as I talked about hearing loss, I think what was happening in the investor's mind was they're picturing a senior in an assisted living community with no money, and they're like "yeah I'm not interested", so I started changing the pitch I tried doing a lot of things, and then I realized that I'm talking to the wrong investors, so I think that's the key, I think you need to microfocus on a much more selective and smaller group of people who are gonna have that empathy for what you're trying to do, it's really hard to teach or force someone to care, they have to sort of come in with that empathy, and it makes it harder to find investors, but to me that's been the only way.

**Samantha:** Yeah I think just piggybacking on that, I think there's this big push recently that every company needs to be a venture backed company, and I think especially in this space that's much harder to do, but I think as Alex mentioned, there's a lot of money out there that specifically is not in venture money which is looking for that 10x return over the course of the year or whatever staggering numbers that they want. And I

think that there's angels out there, there's debt, there's bank loans, there's a lot of ways that you can finance your company, and I think that making sure you've gotten people that stand behind your vision is really important. I've given a lot of pitches where they're like "sure, but you made a really cool robot arm and what if you use it for strawberry picking", and I think that it's something that, we're doing this obviously for a reason, for one purpose, and the robotics was the main () for that reason, so I think that making sure that as you're speaking to investors, making sure you have people on that same page is super important.

**Brittany:** Yeah, I agree, especially starting out during COVID with a virtual travel company all I got was "well isn't this just a pandemic related company", and I can't tell you how many times, and I had a whole slide on market and how many people had disabilities, I had to till them over and over again, I'm not even talking about the pandemic, I'm talking about all of these tens of millions, hundreds of millions of people that before the pandemic and after the pandemic, they're still gonna be in the same position and a lot of people also reality didn't know about the senior space and social isolation reality wasn't brought to the forefront i think until the pandemic, and so it's just, you have to do a really good job of explaining to these people and giving them examples of your target market, so those ser personas are just so important when you're pitching and making sure they understand just how big in dollars that the market is. A lot of people just really just don't realize and have no idea about the size of the community.

**Sandy:** Sam, I'm gonna be checking about the strawberry [picking robot arm for a while, and you're trying, you know you're building a company for a problem. Britney, your comment, I'm building this for the people. It was a problem before the pandemic and it's gonna be a problem after the pandemic. And Alex, I think you hit the nail in the head, you know, I'm jugg;ing around investors, eventually the investors will come along that are listening, you know they're listening to the story that you're telling, they're not bringing their preconceived notions of the market to the table. Really, really fascinating. I do think we could have a whole other discussion on fundraising in this space. I wanna also say to the three of you, starting companies during COVID, during a [andemic, not easy, so that's incredibly well done that your companies are still standing and flourishing right now is a testament to your business leadership. We java one question in the chat that I wanna read out loud. It's from Mia Correa, and she says I find it difficult to advertise to the disability population. Do you have any suggestions for advertising to the blind and visually impaired market more specifically. So I guess Samantha, we'll have you take that one.

**Samantha:** I think it's definitely not easy to do, and I think something that's really important is just really making sure you add that alt text, add those picture descriptions,

and really making sure that the content that people with vision access is the same as the content that vision impaired people access. I think with alt text you can be really lazy about it like saying “woman in frame”, but you really wanna be very specific and make sure that that access is still there. I'm not gonna say that we've really hit the nail in the head on advertising because we don't spend that much time or effort on it because our market is deafblind people which is a whole another barrier into itself, but I think really just making sure that it is accessible is a great first step in making sure that they feel like their needs are heard that way.

**Sandy:** I think on that question too, it might not even necessarily be about, I don't wanna speak for Mia, about reaching your population. You can try to reach people through advertisements via social, radio or print however you wanna do that, but how would you suggest reaching your population? I know you mentioned Samantha, partnerships with local organizations.

**Samantha:** Yeah, that is our biggest method – sorry I misunderstood the question  
Alex

**Sandy:** No you didn't, the question said advertising, but I'm assuming that also it's maybe beyond that.

**Samantha:** Yeah I think that, especially there are so many community groups and I think a lot of people with disabilities are a part of community groups, which tends to be the pattern we've seen, so I think it can be a really great way to also show your interest and show that you're willing to go above and beyond for those communities is by making those trips out and having you know, some braille business cards, and really showing up kind of ready to kind of present what you have to offer to those communities. And again, Alex kind of offered as well, finding leadership positions can help open doors. We went to the Helen Keller national Seminar last week and they're like, we have this registry of tens of thousands of deafblind people, you can now use this registry, so really finding those people that know where your potential stakeholders are will be really key in helping you find them out wherever they are, in the states or globally.

**Alex:** I would just add one experience we've seen which is about, I'll say maybe one out of three, maybe a third of the people who come onto our website sign up for our waiting list are actually friends or family members of the people they're waiting for, so I think friends, families, caregivers are a huge, huge demographic, they're a little harder, trickier to find, they're different to find I'll say, but it's a huge population and it's probably where you can get a little more creative thinking about your marketing and your outreach, you don't always have to go right to the person, right to the end user, there's other ways you can reach people in their circle, who care about them.

**Samantha:** Yes, that makes a lot of sense, the adult kid who buys the product for the parent or whatnot, or in Britney's instance being a B2B and selling to, you know, facilities that are supporting the elderly population, so I think there's a variety of different ways to reach the customer. Awesome, you three are three of my favorite people. I am very, very grateful for you doing this first "how I built this" episode. I think you're all doing something that truly moves the needle on making our world a more accessible place and I can't thank you enough for the work that you're doing and for joining us today. I wanted to thank everyone else for joining, this has been a wonderful experience learning about your experiences in entrepreneurship. Thank you Derek and Eric from the Boston A11Y meetup Group for hosting us, and I'm looking forward to seeing everyone soon in person.

**Derek:** And thank you Sandy, you did a lot of work to put this together so we really appreciate your work too.

**Sandy:** My pleasure, I love using my megaphone for good. All fun. So thank you all so much, I hope everyone has a great night and thank you all for joining.