

Changing What's Possible - S.2, Ep.10 - Transcript

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SPEAKERS

Alex Dunn, Dr. Marie McNeely

D Dr. Marie McNeely 00:01

Hello, and welcome to Changing What's Possible: The Disability Innovation Podcast brought to you by Cerebral Palsy Alliance Research Foundation or CPARF. I'm your host, Dr. Marie McNeely. And this season, we are excited to bring you extraordinary stories about how disability technology and innovation come together. We're thrilled to have you here for part two of our two part interview with Alex Dunn, founder and CEO of Cephable, formerly known as Enabled Play. His company is one of the startups in our 2023 Remarkable US accelerator program. And they very recently updated their brand and their name to Cephable. So listeners, you'll hear us using their previous name Enabled Play throughout this interview. But just keep in mind, it is the same awesome company with a brand new name. And if you haven't listened to part one of our conversation yet, we recommend checking it out to get some background on Alex and Cephable. And today we are going to dig into some of the details on the development of their app, some of the cool features that they've incorporated, and also Alex's vision for the future of the company. So Alex, thank you so much for joining us again today. How are you?

A Alex Dunn 01:10

I'm doing great. Thank you so much for having me.

D Dr. Marie McNeely 01:12

Absolutely. And just to build on our conversation from part one of our interview, who do you think could benefit from using your products?

A Alex Dunn 01:21

I know I've said it before, it kind of sounds I guess a little corny, but there really is something

for everyone with an Enabled Play. And that's really our goal. But ultimately, the biggest benefit is for people that are either slower or experienced pain or are just having challenges with keeping up on like a keyboard or controller. If that is you then Enabled Play is going to be able to augment and automate a lot of that and make it more fun and interactive and easier to use to. But we have users of all ages, I think our youngest person that uses Enabled Play every day is like four years old. And I think our oldest is like 94. And people of all abilities really anywhere to we have users a lot in the US where we're based and in Canada, but we also have users in Australia and the UK, in China and Japan, in Ghana and other countries within West Africa, just using these different inputs in different ways. And we're continuing to grow that community out and reach more people such that you don't really just get into the app and are kind of like, well, I can do everything. But how do I get it to do the thing I want to and finding people that are trying to use it the same way you want to and can share those ideas and thoughts and experiences and ultimately just create a beneficial product for everyone.

D Dr. Marie McNeely 02:30

Absolutely. I think this community aspect of it is great, because that was another question that I had is for people who might not be as confident, let's say with technology, do you have to have some sort of baseline level of tech savvy to use it and set it up?

A Alex Dunn 02:42

Our goal is definitely not admittedly right now versus what it'll be like three weeks from now, having some tech savviness helps. What we're working on, for example, is this sort of personalization and onboarding process where you kind of tell us a little bit about you. And we, using sort of modern AI tools, generate pre built configurations and preferences for you and on our goal is really if you install the app, you sign in, tell us about yourself and you're off and running. And everything else should really be automated from there. But if you want to really get into the weeds of it and get the most out of it, we can step by step get a little bit deeper, but not have to understand how all of the technology works. As long as you understand the concept of what you're trying to control, you kind of have to know how to use a laptop, conceptually what a keyboard does and what a mouse does in terms of moving a cursor around and typing. But beyond that, really our goal is to make it something that's self served and something that is just helpful from the second you sign in.

D Dr. Marie McNeely 03:36

Certainly. And it sounds like you're continuing to develop and refine what's available through Enabled Play. So how do you or how did you incorporate feedback or perspectives from people with disabilities during this design process?

A Alex Dunn 03:48

People with disabilities are involved every day and what we do, even from the original projects, I was building it for my brother, and every week, I would check in with him and be like, Hey, I'm setting it up like this, try it give me some feedback, help me understand what's working for you

what's not, and that grew out of from just my brother to the like I mentioned earlier, the sort of handful of folks that were using it. But now we have a community of about 2500 people that are actively trying new things as we're building and designing. And we take that feedback very directly in the form of interviews or in surveys in an aggregated model. But we keep ourselves open to the feedback from the community. And that's an extremely core value to our team. That openness, we never want to just be building products that we're guessing should help. We want to hear what the problems are that people are facing not just with our app, although we definitely want to hear those too. But just in general with technology access, and even if it's something that doesn't feel like an obvious use case for Enabled Play out of the box, there's usually a way to get there. For example, you have people that control robotic arms with Enabled Play.

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Alex Dunn 04:48

That's not really what we do, but in terms of what we market and how we get you on board, but people have sort of figured out a way to do it and we were able to help them get that set up with just some candid conversations and talking through and ideating. I'm also just in my background in product development, even outside of the disability space. And in the accessibility space, I've always had a background in user centered design and product development, I think no matter what you're building, you're building it for someone. And if that someone is not part of the process, then you're at some point gonna miss the mark. And so it's better to avoid that by just actually including your users and the people you're building for the entire time and in the entire process. And it's really great actually, in this space, because people are so eager to give feedback and share ideas and communicate with others. And especially once you have solved a problem for an individual, they want to continue to help solve those problems for their friends, their family, and other people in the community that they talk with or work with. So really, it's surveys, it's feedback, but it's also just openness. I have people send me emails all the time with direct feedback. And it's important to have everyone on our team available to do that. And just understand what people are seeing and what they're experiencing with our software and also with the software that our software is talking to.

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Dr. Marie McNeely 05:59

Absolutely. I think bringing in those perspectives, getting that feedback is critical. And I'm curious, have you ever received feedback at some point that maybe really surprised you whether that was a use case you weren't expecting or something that people want that you hadn't envisioned?

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Alex Dunn 06:11

I think all the time, one of the interesting things about Enabled Play versus everything else in my career is that it is such a low level tool. When you unlock what a keyboard and mouse can do, you really can do anything digitally. And so especially for people who hadn't had that experience when they were growing up with technology, and instead were limited to the specific scopes of what they were able to do, seeing them ideate on like, Wait, what if I could do this or that, like I was saying before, controlling a fully robotic arm on a power chair, that

was not something I was thinking of is not something anyone else on the team was thinking of. But when they brought up I was like, actually don't see why not like you should actually be able to do that. As long as you're not doing it for anything that's sort of a critical life function, then you should be able to interact with any piece of tech. We also have people looking to do things like control physical toys, from little robots, to RC drones, to even teddy bears with a voice box in it. And eventually there will be more ways to do that with our different inputs and controls. But those are always the interesting ones that we see in the use case side. It's when people look at what we're doing in a keyboard and mouse environment or in a controller environment. But then take that big step up and back and look at all the other things that could possibly do with tech, that it starts to get us thinking a little bit more creatively as well.

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Dr. Marie McNeely 07:24

Well, I think that is so exciting. And I'm curious to hear a little bit more about the key features of your products. I know, there are a wide variety of technology solutions out there. We've mentioned a few of them just in terms of voice assistants and other things that people may use in their daily lives. What really differentiates your products from some of the other things that might be available on the market for people with disabilities?

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Alex Dunn 07:44

The biggest difference is we actually aggregate all of those things together and under one platform and solution that's adaptable. Rather than having you go buy a head mouse and then go buy a Dragon Naturally Speaking, and then you got to go buy physical input devices and switches. That's the mold we want to break and ultimately give it away for free, which is worth clarifying. Like in terms of how we differentiate is end users do not buy the software from us, it's free for basically anything personal use. All the voice controls all the Expression Controls all the virtual buttons, profile creation community, it's all free. And then within those specific inputs, we have some very unique things that we do. For example, with speech recognition, we have a speech recognition model that actually adapts to an individual user speech over time. So the more that you use it, the more it learns how you're speaking and becomes more accurate and more performant. And then even within that we even have settings for sort of like how sensitive you want it to be, we call it optimistic mode. So for example, if you have a speech difference that would make a typical speech recognition model just not work for you things like using Siri, or using a voice assistant, we can actually basically adapt to more optimistic speech recognition based off of the commands that you have in your profile. So for example, if you were using Microsoft Word, and you want it to say something like copy, if you have a hard time with any parts of that word, copy, whether it's the P sound, the Y sound, the hard K sound for the C at the beginning, you don't have to nail all of it, you can actually get as close as possible to it. And then we essentially look at that compared to all the other things that you might be saying in that context. And basically, there's sort of this dial that we can turn up to say like they were probably closest to copy. So we're going to do that rather than waiting for it to recognize the command discreetly.

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Alex Dunn 09:25

In doing that, we also don't require that you sit there and train it yourself, which is also really common in the space of speech recognition for people with speech differences is you don't

have to sit there really okay now say copy 10 times so that we can actually understand what you're saying. You can just type any word that you want to use as a voice command or a sequence of words, a sort of phrase and use those and it'll adapt to you. And it does that extremely well too. And it's also hyper predictive. So in the world of gaming, being able to do things in sequence very, very quickly, is useful, but it's also useful at work. Like if you're going to try to create a PowerPoint presentation, you can do things like say new slide, add a text box, type, this is my title, make that bold copy, add a new slide again, paste it here and just speak as quickly as possible through it. And it'll keep up with you as you're speaking. So it feels extremely natural compared to a lot of other speech recognition. Even when you have a speech difference. In the world of what we do with Expression Controls, a lot of it's the same thing. It's adapting to your face and your movements and your abilities over time and actually letting you tune that specifically to your abilities. So for example, we can do things like head tilting, and turning like if I can tilt my head to the right, and tilt my head to the left, those are two different inputs I can use. But if I can tilt my head to the right so far, and tilt my head to the left, not as far I can actually change just for me how far I need to tilt my head to the left with just the slider. And you can do that for any given expression or gesture that you want to use. So things like eyebrow raising different mouth movements, you can change that from the lower end, where if you have spasticity, and you don't want a whole bunch of false positives, you can decrease it so that you have to get to a very intentional movement or increase it and you have these sort of Twitch based movements. So things like eyebrow raising can be done with tiny, tiny tweaks or head movement can be done with less than a degree of movement versus on the sort of lowest sensitivity eyebrow raising, it's kind of to get it way up and head tilt, these kind of kids like a 35 degree change that's like way drastically different. And all of that, by the way is offline, like the Expression Controls, none of it's recorded, it runs on your phone itself or on your desktop itself. If you're on Mac or PC. Same thing with the speech, none of its ever streamed, none of its ever recorded. So it's extremely private to you. We want you to feel comfortable having a microphone and a camera on at all times without worrying about that going somewhere and being recorded or processed by some other tool. We don't even touch it or record it nevermind any third parties. And it also just means that it's faster that way as well.

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Dr. Marie McNeely 11:42

Absolutely. Well, I have loved that you have this component of your business that you've respect people's privacy. You also mentioned that all of this is freely available to the users for personal use. And I know in addition to creating this amazing product for people with disabilities that is freely available, you developed enabled accessibility for businesses to actually use. So can you talk a little bit more about this and how this program or feature can help businesses?

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Alex Dunn 12:07

Yeah, definitely. So the main thing to note about the limitations of Enabled Play's controls out of the box is it does keyboard and mouse things. If you're a business who's developing software, whether that be a game, an app for banking, a streaming platform, a social network, or really anything else, then usually a keyboard and mouse is not going to do enough. And you want to automate and understand more how users are interacting with it. And that's essentially where we offer our ability to integrate our controls even further into your own software as well. So for example, for game developers being able to make all of their games accessible to users,

not just by the bare minimum, keyboard, and mouse, but on all the platforms they support. So if you're building a mobile game, and you want to add head controls, and voice commands, in order to make it more accessible, you can do that using our tools. Beyond that, it's also about reaching users with disabilities too. We have a growing community. And we'll have a continuing to grow in community of people who know how to use Enabled Play. And ultimately, what we give to businesses is the ability to actually let them know that you're accessible now, and that they can go play your games or bank with you or stream on your platform. And the main goal is connecting people with disabilities to the tools and platforms that are actually now intentionally accessible to them. Not things that are accessible enough in a way like technically accessible or compliance level accessible, but ones that are intentionally equitable in their intention for supporting you and having you be one of their users, depending on what the platform is. So really, that's what we sell is the ability for businesses to make their tools more accessible their games, their apps, their websites, and really anything else digital and then connecting them with users who are interested in actually using it.

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Dr. Marie McNeely 13:48

I think that's remarkable. And having this business piece it sounds like is perhaps what allows you to provide the Enabled Play for users for free. Is this correct?

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Alex Dunn 13:56

Yeah, exactly. Essentially, our business model is such that we want as many people in the community as possible so that we can help them find the tools and platforms that are accessible. And for businesses, there's a huge return on investment with actually acquiring customers that they otherwise wouldn't be able to support. For example, in the financial space here in the US, a majority of people with disabilities are unbanked or underbanked, meaning that they are not managing their own financials independently. And the number one reason for that is because service is not accessible to them. And so even people with disabilities who are banking, they're mostly doing that in person, rather than being a digital first independent financial sort of manager for themselves, like most able bodied people in the US are now. So being able to create an environment where a bank can actually go acquire customers and help them bank independently and manage their own finances. It's a huge win-win the bank actually gets to reach new clients. They get to create a bigger impact. And our users actually now have the ability to bank independently for the ones that weren't able to before and that's why we sort of like being this connector of the community to the people who actually are putting their money where their mouth is to some extent in the world of accessibility, and actually trying to service individuals with disabilities.

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Dr. Marie McNeely 15:08

Certainly, and I think these impact stories are so powerful. Do you have one maybe that sticks out in your mind as someone who you feel like really benefited from Enabled Play?

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Alex Dunn 15:17

Oh my gosh. I have so many. We have people that send us videos and images and stuff and

Oh my gosh, I have so many. We have people that send us videos and images and stuff and stories. And there's one in particular, I always go to because they allowed us to share this video, but there's this little guy, his name's Jackson, I think he's seven. Right now. He lives with AFM. So he's a quadriplegic breathes and speaks through a trach and is in a power chair. And so his parents had reached out to us a while back, because his friends are starting to do things like play Roblox. And as he starts heading through elementary school, they're sort of looking into the future as well. Everything in their middle school and beyond is all on Chromebooks. And he's never been able to use like a laptop or a computer or play a video game before. So they sent us this video of him using enable play for the very first time and he was playing this basketball game, where he was using a phone for face expression controls through our app and raising his eyebrows. And when you raise your eyebrows, it raised the ball up and you sort of had to like time it right. It's actually a really great game, if you're trying to try out face expression controls for the first time, but they sent us a video and you just hear his little Yays! every time he makes a basket. And it is like the most heart melting thing. But now he's continuing to use it and explore different ways to control technology and understanding like what computers are and how they work. So getting in at the entrance level to technology, I think is where we can create the biggest impact. And that's where we really break down the barriers that start early. I mentioned that the sort of beginning of the podcast that even with my own brother observing, when in education, we start heading into this digital first world. And if you're someone who's left behind, or it's just not even as accessible to you, you're going to fall behind at the accelerated rate at which the whole point of the using laptops in schools was meant to propel. And so the earlier we can break that barrier down, the fewer continued issues that can come from that exists. So if you're able to just use technology, when everyone else is starting to use technology, you can keep up or move faster than them. And it's no longer something that's in the way when it's meant to be something that's meant to accelerate the entire student population. So working with kiddos that are using Enable Play is definitely I think some of the most heartwarming impact. But we have stories from users who got jobs for the first time that hadn't in a while since they acquired a disability. We have stories from people who used to play video games with their friends, but no longer could and share some stories and videos of them playing with their friends for the first time hearing their friends excitement when they are able to get in the game with them. We have people who have told us that they've been able to bank for the first time since they acquired a disability as an adult, they no longer have to ask their son or their daughter to manage their finances for them. All of those stories are what drive us to continue to do our work and improve the platform and reach more people with it. And that's the sort of impact we're looking to create.

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Dr. Marie McNeely 17:54

Definitely, and so rewarding to just know that you're having that impact that you're helping people around the world. And you've made phenomenal progress so far. But Alex, what is your vision for the future of Enabled Play?

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Alex Dunn 18:07

Our vision is one in which all of technology is just accessible. That you can walk or roll up to a laptop or a tablet or a phone and just use it the ways that you want to and in the ways that work best for you without having to go through and configure every single aspect of it just for you or to have someone else do that for you. And really just have that fully leveled playing field. In the sort of way we get there it's a lot of automation and continuing to develop our

machine learning models and our AI such that we can understand who you are and how you like to use technology right away and adapt on the fly to what you're trying to do. We're getting there and we're heading there. And ultimately, it's about having that larger community and reaching the hundreds of millions of people that I think could greatly benefit from what Enabled Play can provide them as a solution and fostering the community to share those ideas and the ways they use it and the ways that they don't want to use it and everything else. So the vision is definitely in having the problem ultimately solved in the community being ultimately what solves it, not just the software.

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Dr. Marie McNeely 19:09

Definitely. Well, Alex, we are so excited to continue following your progress. And if our listeners are interested in learning more perhaps trying Cephable themselves, I know they can check out your new website at cephable.com. And how else can they get connected with you and the company?

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Alex Dunn 19:31

Find us anywhere on socials we're just about everywhere. So our YouTube videos on different ways that you can use Enabled Play in our tutorials on Twitter, on Facebook, on LinkedIn, on TikTok and on Discord as well. So once you get the app and get involved, make sure you join the community and start telling people how you're using it and sharing out the profiles that you're creating and grab some from some others too. So you never have to start from scratch and you never have to be alone in your journey with Enabled Play.

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Dr. Marie McNeely 19:56

Fantastic. Well listeners definitely check out Enabled Play and Alex, it's been such a pleasure to have you with us today. Thank you so much for joining us.

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Alex Dunn 20:04

Now the pleasure is all mine. Thank you so much for having me.

D

Dr. Marie McNeely 20:06

Well, it's been wonderful to chat with you at listeners, great to have you here with us as well. And it would be fantastic if you could take a moment to subscribe and rate or review our show on your favorite podcast platform. And we look forward to connecting again in our next episode of Changing What's Possible.