CTA Foundation and Benetech

At the recent Consumer Electronics Show (CES) in Las Vegas, Benetech CEO Betsy Beaumon joined CTA Executive Director Stephen Ewell for a conversation about this program as well as Benetech's other initiatives that promote a more inclusive future through technology.

Steve: Good afternoon. My name is Steve Ewell. I'm the executive director the Consumer Technology Association Foundation. We are the charitable foundation affiliated with CTA and we're focused on how technology could benefit older adults and people with disabilities. I'm really pleased to be joined here by Betsy Beauman, who is CEO of Benetech. Welcome Betsy!

Betsy: Thank you very much it's great to be here.

Steve: So let's start out with tell me what is Benetech, and in particular I know you have the Bookshare program. What is that?

Betsy: So Benetech is a nonprofit and we're a nonprofit that focuses on software for social good so everything we do is really about inclusion and equality for people that don't always get that and our biggest service is called Bookshare and that's the largest online library of accessible books in the world we serve over 600,000 users in 80 countries and we've done a lot in the education space. For example in the US we're the primary provider of educational materials for people with print disabilities. I should mention that Bookshare has some legal limitations. We actually serve people who are blind or severely visually impaired, people that have learning disabilities or have physical disabilities that keep them from using regular books. Essentially, it's the bargain with the publishing industry to say we're not going to go pump out books that would normally have purchasers at the other end. We're working with people who typically don't actually get access to at least most standard print books and even a lot of ebooks that are out there are really not fully accessible for people with disabilities or older adults that have those issues.

Steve: That goes to one of your favorite topics here, as you know as technology, and as this information is being born digital, you're looking for it to be born accessible. How are you engaging with some of the publishers and others to create that?

Betsy: Yes, that's a super-important point because we call this a library, but in fact we are the primary book supplier for many, many people, and it shouldn't be that way. So some years ago when I started going to a lot of digital media publishing kind of events, and people started talking about their content being born digital. I just said, well, wait a minute. Well, then it can be born accessible. Which then means that in fact, that's the way to scale. We're an organization that is built for impact. Not to keep ourselves doing the same thing for years and years and years so that to me is the way that we really have the biggest impact and frankly solve the problem long term. But what we've done is essentially leverage all those relationships that we have with publishers because we have over 850 publishers that give us their books today for Bookshare so if, say a senior were to sign up for Bookshare they could actually get a book the same day that somebody else is getting it through amazon. And be in the same book club for the first time ever for people with print disabilities. And born accessible means that they could buy that same book and just turn on the features that are going to make it work for them.

Steve: Well, that's great. We'll have to see if we can do a book club of Gary Shapiro's new Ninja Future book. Let's talk a little bit about, you've now been a grant recipient of the foundation for a few years. So we've done a number of programs with seniors in a couple different states but then you took a little bit

of a different tact. This year it's really exciting to see how you're able to scale some of the work that you're doing. Tell me a little bit about it.

Betsy: Yeah so so we're really appreciative of the CTA Foundation grants because it's really helped us to do more in the senior community we have the content that seniors want to read. By and large we have all the major novels. You name it, we probably have it. But the problem is that seniors don't really always know that Bookshare exists. So our first couple of CTA grants allowed us to really go out we went out first in Texas and then in Georgia to really do more senior outreach. So some need finding and more discussions. We have seniors who use Bookshare today, but there are many, many more could be benefiting. So, the first couple grants we got out there and we've had a lot of success by being able to have outreach coordinators on the ground who can really reach out to seniors and find them literally where they live sometimes, and where they hang out, and say "here's what this can do for you". You know my little party trick is somebody will name a book and I'll just look it up and see if we have it, and almost always the answer is yes and that tends to impress people.

Now the cool turn that you mentioned is - one of the inputs we got is especially for older seniors easier ways to access. Our books can be accessed on phones, computers, tablets, Braille devices, special audio devices. I mean literally, hundreds of different devices but for some especially the older end of seniors, they said gosh, I just I don't want to deal with all that. And so we're kind of taking a look at what they would want to deal with, and we came upon the fact that if they could just say something like "Hey, Alexa! Read me by Bookshare books." That, all of a sudden, they thought that would be a really good gateway. So our current project is really essentially setting Bookshare up as a streaming service for the automated home, which is why it is super exciting to be here. And, you know, the automated home is growing and changing even as we're doing the project but we're really getting a foothold in being able to have that available.

Steve: Talk about how that leads to kind of scalability as you're able to you know go from reaching a few people in a community to anyone who has a Amazon or Google or other device.

Betsy: Oh yeah! I mean, imagine going on there, and one of your menu options are Bookshare accessible books.I mean then, suddenly instead of us having to go out and find you and tell you all about it, and you sign up. Now all of a sudden, you find us. That is just super powerful and that's that's really been the way that we scale a lot on the other end of the spectrum. In education, it's getting really getting out there schools and other places where people will find us who need us and so you know as profit we don't kind of legions of salespeople are there is selling what we do so this would be just an amazing way to get to both make it more usable for more people, and also way more available, and I expect to scale dramatically.

Steve: I do want to touch on even though it is not necessarily related to the program that were funding, the amount of work that you do with the education programs because obviously here in the tech world weren't really interested in seeing more STEM education but yet you know when we're developing technology if we're not including people with disabilities, that's one of the big challenges. Are we solving the right problems? Are we doing it the right way? How do we get people with disabilities trained with the knowledge on how they become the next developers. So I would love to hear how are you encouraging STEM education through Bookshare and other programs.

Betsy: Yeah we do a lot in that area. Number one is as I mentioned in the US we are funded by the Department of Education they offer some special education programs to offer Bookshare for free to all qualified students. That includes for their science books, their math books. All their books. And if we don't have it, we will go get it, digitize it, and put it in Bookshare. But we also had something called the diagram Center funded by the same group that's all about how do you make STEM accessible? How do you deal with the pictures in a biology book. So, if I want to become an engineer, I am an engineer, I have to study chemistry, physics, math, a lot of things that are really hard to make accessible purely in text. So we actually work, in that case, not only with print disabilities but across the disability spectrum to say, what are the tools? The standard? we've done a ton on tech standards with W3C and other places to make sure that there's actually standards to cover some of the people around here who say ok, I've got a tablet and you can read a super interactive ebook through that. Well some of our standards will make sure that that interaction and the pictures and some of the other pieces can actually be accessible.

Steve: That's so important you know I've talked to a number of people, particularly in the blindness community that mentioned that they stopped going into the sciences and going into engineering because at some point they reached a phase where there was chemistry or another engineering, where there was an aspect where they just can't read the diagrams. They can't see all that, and all of a sudden, it just gets that much harder. If you're trying to explain how do chemicals come together if you can't see a diagram of an atom or devices. It's so important the work that you are doing in that space.

Betsy: Yes it's key because this is the next generation of engineers these are really smart people which should be working at many of the tech companies and just can't get through some of these hurdles. So I want everybody to have the same possibilities that I did.

Steve: Well besides the technologies that you're developing, what are you excited to see here at CES this year?

Betsy: I think you know there's multiple areas. I mean certainly all the stuff in the automated home and smart speakers and that because of our CTA work. It is really useful to take a look at it make sure we know where it's going so we plan. The other one is, you know, we are already leveraging AI. We are leveraging AI for example to help make math accessible. So, starting with little code sprint at Microsoft some time ago, we actually have developed the first prototype of a tool where we can crunch through these pictures that are supposed to be math equations in a book, and turn them into math equations that technology can speak out loud. We are doing that through AI. It is hugely expensive to do that one by one by human so we're actually starting to use machine learning on a lot of the work we've already done. To say how is this math? How do you make it accessible? So those are two big areas. I'm also really interested in smart cities, as we do other work around the social safety net for people with disabilities, seniors, and others. We're both excited and a little concerned about where's the social safety net going? We're doing something called service net, which is actually to help connect people the services better. I think there are huge opportunities for how tech as we go forward can impact that, and how this could be a part of an inclusive smart city. So we are very interested in a whole inclusive smart cities movement, as well as looking at education and employment, and other areas. It seems like there's such an opportunity there to really grant greater access to information both to the individual who's participating in this smart city, but also to the city so that they understand how services are being used and then continue to improve their services.

Steve: I agree I think there's a lot that's exciting, certainly there's challenges. I think there's a lot that can be helpful to people of all ages and abilities. So if people want to know more about Benetech and the work that you're doing, where should they go?

Betsy: So the first place is benetech.org that's B-E-N-E-T-E-C-H. There's not an additional N, like a certain biotech company in our area. so that's Benetech.org. Another one is bookshare.org. To actually check out Bookshare, please sign up! That would be great!

Steve: That's great and actually if someone did want to sign up there are some requirements as far as essentially they would need to get a medical opinion, is that how it goes?

Betsy: So it's a proof of disability and we have a form that one can use. It can be depending on your disability, through the medical side or through if you're at school, it can be through a reading specialist if you have a reading disability. So it depends and we have a list of what that takes, and what that looks like. Our goal is anybody who qualifies should be using the service.

Steve: Well that's great. I really encourage people to take a look and see all the amazing work that you are doing, and really creating and enabling people to access information, and that information is so important to everything from work to play to education, so thank you for the work you are doing.

Betsy: Thank you and thank you for your support

Steve: No problem! We're happy to do it. If people are interested in learning more about the CTA Foundation visit us at: CTAfoundation.tech. Thank you!