Speaker 1: We are here with Sarah Herrlinger of Apple. Now she's just told me her title but I'm not going to remember it. I think of her as champion of all things accessibility, but give us your title please.

Sarah Herrlinger: I am the Director of Global Accessibility Policy and Initiatives at Apple.

Speaker 1: There you go. Now Apple obviously for everybody who has any knowledge of disability and tech listening to this podcast will know that they have been in the van, led the way in accessibility for well over a decade, probably three decades. Now as far as this audience, it's a professional audience here at Tech Share Pro, so not necessarily consumers, but obviously many people that are listening to this podcast will have disabilities or know people that do so. They will be well aware of Apple's position in this area. But as far as talking to professionals about accessibility, about the importance of it, of inclusive design, what messages would you have for that audience?

Sarah Herrlinger: Gosh, I think you know the biggest thing is to just keep at it early and often. You know, accessibility is such an important part of building out any type of technology. Making it work for everyone. You know, at Apple we really think about designing for the margins. I think you make a better product when you take the time to consider all of the different possible use cases, all the different ways that people will interact with whatever you're building. And to build it in a way that everyone can use it. For me, that's what makes me most proud of our technology when it's done, when people who might otherwise not be able to have that connection to their family or their friends or employment or any of those things find a way to use it just like everybody else. And so I think if you make something and at the end of the day, if you're proud of the work you do, accessibility just inherently becomes a piece of that.

Speaker 1: Absolutely. And accessibility so often seen as a bolt on exercise or requirement to cater for people with a specific need. In Apple it's completely the reverse. You know, accessibility is a given and that's what really inspires confidence for disabled users, disabled customers that they know that they're not going to be left behind in the latest greatest developments or releases or products from Apple.

 To what extent is diversity reflected in the teams that you have? Obviously at the C-level down, it's prioritized in a very significant way, but what does the breakdown of disability diversity across all the different teams within Apple look like?

Sarah Herrlinger: Yeah, well inclusion and diversity is incredibly important to us. And in particular when we're talking about the realm of accessibility, we live by the mantra of nothing about us without us as so many in the communities do. As we build our products, we don't do it in a vacuum. We employ individuals with disabilities as a part of our teams both as we build the specific types of assistive technologies that benefit each community, but also by doing that, you make more accessible products in general. Which then makes it easier to be employing individuals across every spectrum of the company. And then that just fuels that continued cycle of making better products. People who are in totally different groups send back feedback to the accessibility team saying, "Hey, I'd love it if it did this," or "Hey I found a bug here." And that helps us make a better product all around.

Speaker 1: Absolutely. Now there are some real happening areas in terms of accessibility, AI and machine learning is helping overcome people's disabilities and impairments and being able to access information and the world around them and that sort of thing. The built-in sophistication of accessibility within, for example, iOS 13 with full voice control. So things are moving so quickly in this area. Where for you as, Chief Head Of Accessibility and all things inclusion within Apple, which areas are you most excited about and which areas are Apple prioritizing going forward?

Sarah Herrlinger: Yeah, I think there's a lot of great work that's being done in the areas of machine learning and AI and they cover off a lot of different products that Apple makes or different features that we have. I mean you mentioned voice control, that's certainly one where we are using a lot to make sure that anybody who's using voice control has the information that they need on device, not out in a cloud but within the device itself in order to ensure that they can get that full functionality using just their voice.

 There's a lot of other work we're doing in machine learning around, image description. One of the things I'm really excited about that came out with iOS 13 is the fact that we are now using machine learning to try and identify images and elements in things like apps. Even if a developer hasn't gone through all of the steps that they should to make an app accessible.

 So as much as we can, we're trying to provide back information where if you were to say something like, "Button, possibly home." And really trying to give as much information as we can to a user and doing it in a way that is respectful of their use case and their privacy.

Speaker 1: Absolutely. My latest tech acquisition I'd absolutely love is a smart coffee mug, which keeps my beverage exactly the temperature I want. And the two most important buttons on the app are great long strings of incomprehensible texts. And after the first one it says possibly menu. And after the second one it says possibly settings and they absolutely are those. So yeah, it's really, really useful. With voice control, the fact that as a voiceover user there could be a question mark if it was any other organization other than Apple. In a blind user's mind, for example, is voice control going to be something that we can use? Is it going to be compatible with voiceover? Of course it is.

 Back in the days when somebody with a vision impairment and a motor difficulty who had to use say Dragon and Jaws, they needed special scripts to make the Jaw speak properly as you did things by voice. But now everything works really, really well. And we've done a demo of that on the podcast on TechTalk, [inaudible 00:06:50] TechTalk podcast showing those two in action together. So yeah, it's a given.

Speaker 3: Hi Steven. Can you tell us a bit more about voice control for those that don't know what it is?

Sarah Herrlinger: Yeah, so voice control is a new feature that's built into both iOS 13 and Catalina. And the idea behind it is that it gives full control of devices using just your voice. So that's both being able to navigate through elements on the screen, being able to dictate seamlessly into fields or dictate email messages, whatever it might be in order to be able to get into all of the little nooks and crannies of the operating systems and use it the way anyone else would as well. So it's everything from open maps, find an address, send that, click shares or tap share, send that map address to someone through a message, take a screenshot. All those things are commands that you can ask the device and it will go ahead and do for you without having to ever interact using a keyboard or a mouse or a finger gesture or any of those kinds of things.

Speaker 1: And something like the TV plus service. It's just a given that all of those shows are going to come with AD out of the box audio description for blind people and also lots of captions in multiple languages.

Sarah Herrlinger: Yeah, I'm really excited about the work we've done on Apple TV Plus. We're committed to providing close captioning in 40 plus languages as well as audio descriptions in nine languages. And because we are the distributor of, or the creator and distributor of our content, that allows us to be able to deliver those globally. So we don't have to worry about the regional restrictions one might have. So you can be an English speaker but in Japan and still want to get audio descriptions Italian and have the ability to see all nine options available to you and pick the one you want. So we're really working to try and make sure that it's as inclusive as possible.

 The other thing I'm really excited about with the audio description side of this is we're delivering audio descriptions and Atmos, which is a first in the industry. And for those of you who aren't really familiar with Atmos, it's the highest quality audio available today. We want to make sure that if you have a system that allows for Atmos that gives Atmos or supports Atmos that we're providing you with the Atmos file. Because for us, we looked at a lot of the ways people did audio descriptions and they would almost dumbed down the audio to 5.1 or stereo when audio descriptions were created. And we felt like it was important to deliver an experience to a community for whom audio is so relevant that we do it in a way that was the best possible quality that we could and quite frankly the same quality that everyone else is getting.

Speaker 3: Robyn can could [inaudible 00:10:14] as I could about the wonderful things that Apple have done for us as blind people and for the wider disabled community. I think what I want to ask you about is MacroS and it's voiceover in particular for one question. Because I want to ask you about with the inclusion now of catalyst apps and the way that Catalina is bringing in these catalyst apps. How is that going to work with accessibility because the that is that always that concern? I always remember when Microsoft did it, when they started bringing the windows apps and they weren't as accessible because you know Rita or Jaws or whatever wouldn't work as well with it. I know this is something that you'll be working on, but I guess you hope that everything will be as accessible irrespective of what the app is.

 For those who don't know, of course catalyst apps are essentially bringing together or making it easier for developers to create one single app that goes on multiple platforms rather than a separate iPad application or a Macro S application. But the key thing for us is are the accessible.

Sarah Herrlinger: Yeah, certainly the intent is that they will be as accessible on Catalina as they are on iOS. You know it is porting a lot of that same code base over to make that happen and the accessibility team has been very much involved in that process. With that being said, if someone does find an app that's not working well or a bugs within something, we absolutely would want to know about it. So if people can share through our email address, accessibility@apple.com anything that they find that they think needs improvement, it's great for us to be able to take it back to the teams to help them make process better. And also in some cases, if it is a some quirk that's being done by the developer themselves, we can also work with our developer relations team to try and make sure that they're using our API APIs properly and doing what they need to do.

Speaker 3: I mean, the key thing I mentioned specifically there about catalyst apps and voiceover, but of course there are many features of the MapQuest platform that are available for pan disability. And that's again something that is brilliant because disabled people, no matter who you are ... I mean my own personal study very briefly, had someone come up to me once and suggest that I need to be careful about my hearing cause listen to music particularly loud. And then when they learned that I had a visual impairment said, "Oh it's okay because you've got your disability quarter. You've got your blinders so you're not going to get deafness as well." It's as if you get some kind of ... You can't have more than one disability. And I think that's important for people to understand, which is why having a pan disability options available on these devices is so important. Isn't it?

Sarah Herrlinger: Well, gosh, if you're worried about losing a little bit of your hearing, we've got an app for you.

Speaker 3: Excellent.

Sarah Herrlinger: There's a new app that's built into the Apple watch, OS that is called Noise. And what it does is through the, the latest Apple watch, it listens to the ambient sound around you to tell you whether that sound level, the decibel level might be or how high it is and therefore whether it might be causing any damage to you. So imagine if you're just moving through space in an average day, it would tell you that the decibel level is good and you're okay. But if you happen to be walking through a city and you go past a construction site, it will give you an alert that the decibel level has gotten quite high and you probably would want to move on a little bit in order to avoid spending time in that where you might cause yourself some damage to your hearing.

 If on the flip side, you're at a rock concert and you've consciously chosen to be in a very loud space, it will also give you that alert. But based on the fact that you're going to stay there, it will track the amount of time that you've spent in that and then show that in the health app on the iPhone so that you have a historical record of points where you've put yourself into a sound environment that's quite loud and therefore you can have that sort of historical knowledge of, "Are there certain places I go which are louder than others. How am I monitoring this in my own life?" Regardless of who we are in the world, our use of technology is unique. And when you look at individuals with our disabilities, that is still the same. Everyone's experience is their own.

 And so how they choose to set up a device, how they want to use it is their own, regardless of whether they have one disability but still choose to, for example, manage their hearing. Even though they might be a member of the blind community, that's a totally reasonable thing to want to do and to use features that support a different community just because that might improve their productivity or just their daily life. So I think for us it's always about making sure that everything works together as best we can because we have no idea how someone might choose to set up their own device.

Speaker 3: As I see, Apple has done a huge amount of work here in the field of accessibility and a lot of under your leadership, which is fantastic and we thank you for that. But how important do you think therefore it is, how much of an onus is on you to go out and speak to business, to talk to businesses about the importance of building that accessibility into either their applications or their websites? How much of that falls to you as well as as the creator of the devices, if you like, that that people use to make these products?

Sarah Herrlinger: Well, I think you can look at that in a couple of different ways. I mean that's one of the reasons why I love the conference that we happen to be sitting at right now. Tech Share Pro's a great conference for bringing the message to other companies. For us we've always viewed it accessibility as one of our core corporate values and our basic human rights. So to get up in front of other companies and talk about not thinking about this as a compliance issue, but thinking about this as a customer issue and a human issue I think is important. And something that I always appreciate doing. On top of that as you mentioned, is we are the sort of platform upon which many other companies build their products, build applications and such to run.

 It is also important that our company talks about accessibility. And so as we work with even our developer relations team on going out to talk to everybody who is making their own apps to run on our platforms, that they understand the, the basic APIs that we provide to make accessibility a seamless part of their design process. How to use the accessibility inspector in order to better to figure out where they may want to improve their accessibility along the way and whether they're doing all the proper things that they need to to make an app accessible. And then just talking to them about engagement with the communities as well. I feel like that is something that I want to do a lot. I feel like we should be doing that in order to help other companies understand that big corporations care that having a foundation of ethics and morals and core corporate values really matters. And accessibility is a huge part of that.

Speaker 1: And that absolutely is reflected in everything that Apple does. Whether it's Tim Cook vehemently defending your stance or your investment in digital inclusion in investment calls through to putting accessibility at the top level of settings in iOS 13. Everything that you do makes that message loud and clear that accessibility is really important. As a blind person, I'm as excited about the potential for AR kit for example, which many people might think has no application for someone with no vision at all. It's capability to help me understand the world around me and we're already seeing apps that are leveraging that capability that otherwise would have had to work from the ground up to do object recognition and edge recognition and that sort of thing to help with mobility. And again, as a blind person, I'm really, really excited about the potential. If it ever comes to pass of say Apple glass as everybody else, I will be using that camera to death. Because it will just help me know about the world around me, recognize text, that sort of thing. But as far as developments, future developments, what are you as Apple most excited about going forward?

Sarah Herrlinger: I think there's a lot of things to consider. Some of those are where we might have gaps to fill. One of our goals every year is to try and increase the number of individuals or the communities that we support. So that no one is left behind and more people have the opportunity to live productive, creative lives using our technology. So I think there's a lot in terms of looking at what are new types of assistive technologies to build. But then there's also just the fact that we are a consumer products company that's making really awesome technology for everyone to use. And as part of that process, we look at how does this apply for individuals with disabilities? How do we make sure that everything that every other engineer at Apple is creating is something that works for individuals with a wide range of accessible needs?

 I think when you were talking about some of the ... the way that we think about the design of our technology instead of having a view of why would someone want to do this as a negative, it's why wouldn't someone want to do this? And so as we look at really any of the things that we create, it's there's never a limitation of, "Oh, someone with X disability would never want to do such and such." It's why wouldn't they? How do we figure out how to make that happen? How do we take this really cool thing and make it accessible to as many people as we possibly can?

Speaker 3: But that's the challenge of course, isn't it? Because there are businesses out there who do say that. We've heard from businesses ourselves who say, "Well, we don't get many blind people here," or, "Not many disabled people use this product." The sense is that we're undervalued considerably in society. And that of course it's a challenge. What I do want to ask you about is collaboration. We're sitting here in the Google building and no one's said, "Hey, there's someone from Apple here. We need to throw them out immediately." Lots of collaboration works here, doesn't it? And that's an important thing. And I remember you talking and Chris Patton as well from Google speaking Tech Share Pro last year. And I was quite surprised myself when I heard, "Oh yeah, we worked together on accessibility. We worked together on these things." Because I think a lot of business might think you guys are quite separate. I think a lot of people might think is always separate. But you do collaborate.

Sarah Herrlinger: I think wherever we possibly can, we do want to collaborate. We do see that any positive moves forward and in the work that we do helps everyone. And so when we look at things like the braille human interface guidelines that we all collaborated on about a year or so ago that's has the potential to have huge positive implications for the blind community that any braille display moving forward could be used on any device because we're all working with this same protocols on the back end. As we look at things like that where we can try and come up with what is the best thing we could possibly do for the community and do it together, that is a really important part of what I think all of us who are supporting the accessibility realm want to do. We care about accessibility deeply, we care about our companies as well. And I think the other side of that is that we all take those foundational elements then. And add our own secret sauce in order to make them better, but wherever we can to try and influence in positive ways. I have great respect for my colleagues at so many companies and so many that are here. And it's always great to be able to come back and see them and talk to them about what we can do to make things even better.

Speaker 3: You get the emails into the accessibility Apple.com email address and then I imagine you get lots of feedback in various ways. I imagine you get lots of positive feedback and I want to ask you, is there anything that's really stood out? Has something landed on your desk? Someone has come in and said to you, "Sarah, you have to see this feedback. This is why we do this. This is why we go to bed in the morning."

Sarah Herrlinger: Yeah, I would say thankfully we get a decent amount of that, which is nice. I think it's always-

Speaker 3: Yeah, you'll get all of it. Yeah, I can imagine.

Sarah Herrlinger: It is important to get both the negatives and at times to get the positives to see why it matters. You know, I don't know that there's a one specific one, but I think that the ones that come in that say, "You really did change my life," are the ones that I think make us feel like our work really matters. When someone says, "Without this I might have been cut off from something that was incredibly important to me. I might've lost my job or I might not have had that connection with my family and friends." Those are the ones I think that have the most profound effect when you know that it's not just a something ... It's really a life changing piece of technology that you've created.

Speaker 1: And that's probably the tip of the iceberg because I it wouldn't be an over exaggeration to say that Apple leading the way to a much more inclusive digital landscape really has changed my life. But yeah, I would never consider or have never thought to email accessibility@apple.com to say thank you.

Speaker 3: We will today. We will do that today.

Speaker 1: So yeah, I'm sure it's the tip of the iceberg and there's a huge amount of love in the disabled community, their family and friends towards the work that you guys have been doing and all the products, all the services that will come out in the future. It is hugely empowering as a disabled person to think I'm going to be part of that. I'm not going to be left behind that it will be for me too. And I think that's really powerful.

Speaker 3: Yeah. Cool. Sarah, thank you so much for coming onto the broadcast has been a joy speaking to you.

Sarah Herrlinger: Absolutely. It was a lot of fun. Thank you very much.