Hadley

Hadley Presents: Android Accessibility

Presented by Ricky Enger

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Ricky Enger: Welcome to Hadley Presents. I'm your host Ricky Enger inviting you to sit back, relax, and enjoy a conversation with the experts. Today our expert is Android accessibility product manager, Brian Kimler. Welcome to the show. Brian, how are you?

Brian Kimler: I'm well, thank you, Ricky.

Ricky Enger: Excellent. You have a really cool title but talk a little bit about what that entails. What do you do?

Brian Kimler: Yeah, so the title may be cool. I think the job itself is actually even cooler and so what do I mean by that? Basically as a product manager on Android for accessibility, my job is to help make the platform more accessible for more users so that everybody can use Android. And in particular what that means for blind and low vision users is that we create new features and we use and leverage innovative Google technologies, so that it's simply easier and more efficient for those who have blindness or low vision to interact better with the real world. Because this device actually has a tremendous amount of power above and apart from itself to open up experiences.

Ricky Enger: Yeah, it's funny, we talk about Android phones and other types of smartphones, and the ironic thing is that the phone portion of the device is kind of the smallest part of what it does. So it's amazing to have so many possibilities for these devices. I'm always kind of fascinated by the paths that people you've been at Google for over 10 years, I think, but you haven't been in accessibility for that whole time. How did you come to be a part of accessibility at Google?

Brian Kimler: That's correct. They've been at Google now almost 13 years, and I'm in my third role, or third career, within Google. And I think each step along my career trajectory has been getting me closer to the thing that I'm really truly passionate about, which is making Android and other Google experiences more available. Before I joined the Android accessibility, I did a bunch of 20% projects. 20% projects are this kind of notion that anybody at Google can take a day out of their work week to work on anything that they care or are passionate about. Then at the same time, in my own career, I was undergoing a transition getting really inspired to launch new products and create new experiences for these users and these other markets. And so I pursued a transition into product management. And my first job in that is my current job, which I've now been in for just over two years. Bringing Google and Android experiences to users who have needs that are harder to address than general users was a great way to further that Google mission. And so I'm very excited literally every day that I go into work.

Ricky Enger: That's awesome. It's wonderful when you don't dread going to your job and it's really great that you can make this difference just in making things more accessible overall for people. So what things are available first ... let's start with low vision. What can people do to make their phones easier to use or see if they have low vision?

Brian Kimler: Anything that you need to do from a product standpoint has to kind of by definition have, number one, a lot of options and the number two, those options need to play well with each other, right? So we have a number of different display accommodations. Basically the ability to make the screen darker so that helps users who have light sensitivity. And one of the biggest things that we've done there in the last year is introduced a dark theme. Basically takes any elements on the display that are light or white or bright and it makes them dark. It's a desired feature. And interestingly users who do not have any sort of low vision actually really love this future as well. And we have some other features in that realm. We did a color inversion feature and we're constantly iterating and evolving these features. We have high contrast which helps make text elements on the screen pop out so they're more readable, more legible. And then of course we have fairly standard features such as being able to improve the size or increase the size of the text and whatnot. And there's a lot of cool other things that we'll be working on in the coming years.

Ricky Enger: And actually Hadley has a really nice exploration of these features done by Douglas Walker. They're really, really good. So those are an excellent resource for people looking to just see how do I access this stuff on my phone? I just found out there's dark mode, so how do I activate it? So we do have that resource and there's one forthcoming on TalkBack as well. And of course speaking of TalkBack, let's talk about what is available for those who don't want to depend on screen output at all.

Brian Kimler: So TalkBack, is what's known as a screen reader. And so TalkBack really allows you to use gestures to explore the elements on the screen. Those elements on the screen are read back and it’s a really powerful capability.

Ricky Enger: I've used technology for probably longer than I care to admit. I didn't want to date myself, but this ability to take a piece of glass and interact with it successfully is really amazing and very powerful.

Brian Kimler: It is amazing. You know, it's much more than a feature. It's almost in the other operating system because if you think about it for a blind user, TalkBack is literally how that person would interact with any other app or any other experience on the device. We're excited about the challenge of working and improving TalkBack and making it something that helps users be more efficient and ideally, a state of parity with sighted users,

Ricky Enger: A huge step was taken in that direction just by having this available out of the box, right? So a user can buy a phone or a tablet and there's no go download a piece of software and by the way, use this inaccessible phone to download that piece of software. It's actually available right out of the box. Are there ways that users can turn on these features independently? So just walk into a store and say, "I would like to pick up this phone and turn on TalkBack or look at the accessibility features."

Brian Kimler: That's a great question. And it sort of underscores some of our principles on the things that we aspire to when we develop products on inaccessibility, right? Not just for blind and low vision users, but for all of these users. Ideally one of those principles is independence, right? So we want to build a device that enables users to be independent. And what that means is they should be at no disadvantage. So when blind user walks into a store and buys an Android device, right? They should be able to turn that device on, set up and configure the device and operate it out of the box, right? And that to us is that definition of independence. A user is able to buy that device in the very first setup screen, able to turn on certain low vision and blind accommodations, specifically TalkBack and select to speak. So they're able to hear that content, walk through that set up flow, and then begin using their device without having to rely on the visual display to use it. You don't want people to have to rely on a friend or caregiver.

Ricky Enger: So the software is a huge part of the equation of course, but it's only one part of the equation. You've got to have something to run it on. I know that there are, of course, Google-branded phones. Can you talk a little about the options? Because if you go to the store, there's like this bewildering array of things. Or if you're even thinking about purchasing a Google-branded phone, what are the differences between all of these things? How do I decide what's best for me?

Brian Kimler: Sure. Yeah. So I mean, the philosophy behind Android is a philosophy of openness and that's why it has such broad adoption among so many different OEMs from Google and the Pixel branded experience to Samsung. So let me just talk about the Google side of that. So when we talk about Pixel, there are actually fewer phones. So that makes it easier and simpler for you for users. We just launched a Pixel 4 phone, and one of the flagship features on that is a feature for deaf and hard of hearing users called Live Caption, which takes any audio content and it's able to transcribe that content so that it can be read and therefore be accessible. And that's really the flagship phone and the flagship feature in Pixel. There's also a Pixel 3A and the Pixel 3A is meant to be more of an affordable phone. So it still has a lot of power. It still has a lot of that pure referenced Google experience, but it's a little bit lower cost, so more people can have access to it and more people can use it.

Ricky Enger: Are there things that people should think about? Maybe not specific things but given that Google is so open and that's one of the great things about Android, I guess that means that manufacturers can kind of do their own thing.

Brian Kimler: Sure. So Android is, at its base, and at its core, it's an open source operating system. And so therefore many, many, many OEMs from Sony to Samsung to LG, Sharp, I mean there's more than I could possibly name, have adopted Android. And to some extent adapted Android. And by adapted, I mean create their own experiences, tailor the UI to maybe their markets or their user's needs or to where they feel like the state of innovation should be in this smartphone place. But there's a certain common set of things that we want to be part of all Android experiences. And one of them is accessibility. So one of the things that we do with TalkBack, which is part of a greater suite of products called Android Accessibility Suite, is we make Android Accessibility Suite available to all of our OEMs, all of our original equipment manufacturers. So the Sonys, the Samsungs, the LGS and so forth, so that they can take Android Accessibility Suite at no charge, make sure it's part of their experience and thereby somewhat guarantee that Android is accessible and that accessibility experience is consistent across Android devices.

Ricky Enger: And I know you guys don't develop this stuff in a vacuum. You may have ideas about what accessibility might be, but I think you get input from other people, people who are actually going to be using these features. So how does that work? How do you go about really getting the users involved in terms of these are ideas that we have, will this work? And then of course getting feedback once things are out in the public and figuring out whether they are actually working as intended.

Brian Kimler: 101 for any product development process or experience is developing and building empathy. And that applies to any user, and not just accessibility. But in the accessibility space it's even more important. And it's especially more important if you're a product developer like myself who isn't necessarily an end user. So I'm a sighted person. I'm not even low vision, right? And so I may have informed ideas and that type of thing, but it's very, very, very important for me to work with blind and low vision engineers, blind and low vision designers, blind and low vision product managers and so forth inside of Google. And there are many people who can actually bring that first-person experience into the product. But even that isn't enough. So it's really essential and incumbent upon us to work with a greater community of testers and users who are blind and low vision, both within Google and outside of Google. And so from the standpoint of working with folks outside of Google, we work with trusted tester communities. So we have some communities of typically a small number of users to roll out features and test features and get feedback early on features before we release them. So we know that we're building the right thing and we're able to validate our experiences.

Ricky Enger: I would venture to say you do a lot in a day. Is there anything about your job ... and clearly, you're passionate about it overall ... but is there anything that really sticks out to you that you just love above all else?

Brian Kimler: What I love more than anything else is when I interact with a user or a family member of a user who has accessibility means and they've been helped or touched by something that we built. Be it an entire product or be it feature or an experience. When I hear a story about somehow we've touched somebody lives and helped connect people or made a difference or made something a little more efficient or easier for a user. That to me is my biggest reward for a job well done.

Ricky Enger: For people who want to know more about Android and specifically Android accessibility, upcoming features or maybe they have questions about how features work, that kind of thing. Do you have a resource or two that people can check out?

Brian Kimler: Sure. So anybody can go to android.com/accessibility and basically, it pretty much goes through and talks about some of our latest and greatest features and has stories and videos. So that you can find out more.

Ricky Enger: Fantastic. Well Brian, thank you so much for joining us. I appreciate learning a little bit more about kind of behind the scenes how things work at Google and I'm excited to see what Android has in store for us in the future.

Brian Kimler: Sure thing. Ricky, thanks so much for having me on the program.

Ricky Enger: Got something to say. Share your thoughts about this episode of Hadley presents or make suggestions for future episodes. We'd love to hear from you. Send us an email at podcast@hadley.edu that's P-O-D-C-A-S-T@hadley.edu or leave us a message at (847) 784-2870. Thanks for listening.