



How Mobile Phones Can Improve Access to Services for Persons with Disabilities

Video Demonstration Transcript

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Presenter:

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Hello, my name is Douglas Goist. I'm with National Industries for the Blind. We're a nonprofit in the United States and we're the world's largest employer of persons who are blind. And today I'm going to be showing you some technology, more specifically mobile phone technology as well as computer technology that allows a person who is blind to access websites, applications, banking systems, et cetera in a very effective and efficient way.

What I have in front of me now is a laptop computer. On it is installed what's called a screen reading application. What that means is anything in text that's on my computer screen, it will read in a text to speech function. Right now I have the Chase website opened up, the Chase Bank website and I have the voice in a very fast rate because my ear is tuned to the speed. So don't let that dissuade you from understanding what's going on the screen. So I'm going to start from the top of the page and scroll down and just have you listen to the voice as it reads off the information on Chase's home page. So here we go. And I'm just going to let it read the whole page in a continuous function.

[Reader]

See, I was able to hear all of that and that's – it was an advertisement. There was a user id login, password and what I'm going to do now is slow the voice down so you can understand it a little better.

[Reader]

So again, I'm at the top of the page and I'll slow down.

[Reader]

So this is a little slower than normal speech rate. But it's telling me links. It's a very powerful screening application. This one is called JAWS, which stands for Job Access with Speech, made by Freedom Scientific. I'm able to see anything on the screen that pretty much anyone else does except for pictures and graphics. For instance, I could even use a screen command to see what fonts – that tells me the font is eight point and it's left justified.

Okay, what I'm going to show you now is an example of mobile phone technology that's very accessible to the blind. In fact, I would say it's probably the most accessible option that there is and that's the iPhone with built in screen reading technology as well as zoom technology, meaning the screen reading technology, it speaks all of the text information on a phone screen and the zoom technology has the ability to enlarge fonts as well as invert the screen colors, for instance, black screen with a white background. What I'm going to show you is a mobile banking application from Chase mobile. It's a free download and what that allows you to do is you can check your balances. You can do money transfers. You can find ATM locations according to your GPS location that's built into the phone and it's very intuitive and easy to navigate with finger swipes, what an individual using voiceover technology would be able to locate or navigate.

I will turn the phone around now so you can see how I'm able to navigate with the voice. So this is a picture of the Chase Mobile phone app, which again is free from Chase and I'm currently in selection to see what my options are as far as alert managers, payment, transfers, account balances and with voiceover, it's a simple finger swipe, left to right to go up and down the screen. So you'll be able to hear what selection is being highlighted.

Alerts history and that tells me I'm at the bottom. I'm sorry. Push alerts. It was just an error sound you heard. My accounts. Pay and transfer. Deposits. And it says tab, three or four meaning there are four selections in this – telling a blind user there are four items. That way you're not confused where you are or how many, if there are 15 items and you're not seeing all of them, it just reminds you of that. So I'll go back up by left swipe.

And we'll go under alerts history. No, we'll go under manage alerts and it's just a double tap. That says back button. Log off and they emphasize the heading level so you know where you are on the page as well and it's very intuitive and very easy to use. There's really not much on an application like this that's not accessible to somebody who can't see. They've done a really good job of making it completely accessible as far as the primary functions that one would need.

I'm back on the Chase Mobile banking free app and I'm back on the manage alerts page. So, what I'm going to show you now is in the event that somebody blind or visually impaired would want to have privacy, there's a function of the iPhone, all iPhones, this is a 3GS again, that allows you to keep your information private, so if somebody's standing over your shoulder, you're seated beside somebody. You're on public transportation and you don't want your account balances and financial information, contact information compromised, you can turn on and of what's called a screen curtain and it's as simple as a triple finger tap and I'll show you on this screen s I'll be swiping. So let's say I'm in my

account information and I hear somebody near me, I just do a triple tap and it blacks the screen out, but I can still navigate. It's saying accounts, next, one of ten, it reads all the buttons. Pay and transfer. Deposits. Now, if you have a headset on, this would all be private and nobody would be hearing this, so I'll turn the screen curtain back on with a triple finger tap.

It's back off. I'm sorry. And I have ear buds here that I would plug into the top so for instance, in my situation, I could sit on a metro bus or a subway and turn the screen curtain on, which isn't not on right now, but and navigate and listen to everything through my screen. So none of my information is compromised and it just gives me that extra layer of protection.

So what I'm showing you now is an application called V-Lingo. It's a pay application, but in my opinion, it's well worth the price. What this allows someone visually impaired to do is you can speak into your phone and find restaurants, banks, ATMs, really any information that a Google search can do and it'll use your GPS location from your phone and tell you distance and address and even phone numbers that you can double click on. So I'm going to find – it says press and speak. So let's just say I'm going to look for a sushi restaurant, the nearest one, so I'll double tap.

Find nearest sushi restaurant. That tone means it was analyzing what I was saying and now it's finding it. Now in the text field, it's already in there. It's a sushi restaurant. Tab choice to see results.

So there are some ads on here, but you can ignore those and I'm going to choose sushi restaurant, double tap. Loading. In progress. Okay, so it's giving me now results of business listings according to the distance from my phone. So it's telling me there are 20 sushi restaurant matches within my radius.

Eighteenth Street, it has a link to the address and the phone number. You can just double tap the phone number and it'll call the restaurant. Call, 1.61 miles, so they have it down to the tenth of a mile and they have 20 restaurants or this app has 20 restaurants that they're showing me are my choices. So, it's a really useful function or app for somebody who need to find ATMs, taxis, bus services, information, addresses. In the future this could be – it's only going to get better and more expensive across the world in my opinion, so someone in any country eventually will be able to at least find locations of businesses or even friend and family.

Another useful app for the persons who are visually impaired and blind is an app called money reader. What it does is it uses your iPhone or Android phone camera to identify currency. Once it's opened, it

stays open and all you have to do is hold your phone within proximity of the bill and it'll tell you what it is just automatically so we'll see how it does with this \$20.00 bill. That's how fast and easy this app is. You don't even need to be lined up. You can be askew a little bit and it's still recognizing what it is. It's very useful when you're doing daily transactions with somebody for food or deliveries and what have you and you want to get the correct change. You can make sure that that's happening.

[End of Audio]