



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

## **Q & A Transcript**

**April 27, 2012**

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*Female:*

Thank you so much. We have three questions. I would like to ask on behalf of indirect line who is joining us with a nonprofit in D.C. And the question is for Charlotte and Axel. Could you speak about your strategic plan for the next three to seven years on increasing outreach and accessibility of mobile technology, globally speaking, especially with regard to partnerships with philanthropy and use social venture capital \_\_\_\_ government to include the use of technology and training and educational protocol. And then there is another question directly to Charlotte from Indra. Based on your assessment of available data with regard to persons with disabilities, what do you believe are the top three challenges that development across and partners should consider in creating accessibility of mobile technology?

*Male:*

So from multiple \_\_\_\_ standpoint for a minute \_\_\_\_ standpoint, let me maybe just lay out what we are doing. The first thing we did was to partner with the International Telecommunication Union to actually create a series of tools for telecom regulators to understand the nature of the issue and how they should engage their local mobile operators in discussing greater accessibility of hardware and services.

So, in order do that, we put together online a toolkit for policy makers, which has a section on mobile, but it's limited, so this year, this past year, we've published a report on how to make mobile phones and services accessible which is really like a basic – it's about 100 page report. It covers every single thing that mobile operators and regulators should know about making mobile phone accessible.

We took that whole content and did quite a few seminars in many different regions of the world and mostly in the context of telecom regulators and operators meetings. So, for example, we did the meeting in Compala, Uganda where we had the east African organization of communications, which is the regulators and the mobile operators together from five countries. We also asked persons with disabilities organizations to come so we had like a three-day meeting there where we actually spent an entire day just on mobile accessibility.

We did the same in West Africa in Mali, actually, for the West African regulators. And so on and so forth. The other thing we do is try to actually get industry to be more focused on it. So last year, we launched what we call the \_\_\_\_\_ summit, which we actually held here with the support of the FCC in Washington and the ITU actually. We had about 34 countries showing up, many regulators and mobile operators. It was all for two and a half days and highly focused on mobile accessibility technology from legal, regulatory obligations to actual solutions. We had a lot of folks demonstrating applications, new technology, and assistive technologies.

We had a little fair. I mean, you know, everything you normally do to make some noise around it. So, we intend to keep doing that. This year we have a briefing session on June 4 at the FCC again on that same topic and then one in Dubai, one in Milan for Europe and one in Beijing for China. And then in next year in June of 2013, we come back to Washington with a very large event with an exposition of technology as well. So this is really meant to just promote accessible mobile telephony and mobile services.

I think the best thing to do is to keep the pressure on. Show the business case to mobile operators. Keep showing that it brings commercial benefits to them because that's going to talk to them. But also, give incentives to regulators to do the right thing. And our main recommendation is for regulators to convene national negotiations among stakeholders with persons with disabilities rather than taking blind unilateral decisions and regulating without talking to stakeholders first because we believe that unless the person with disabilities are involved in the process, it is not going to work.

And we have seen success everywhere Persons with Disabilities were involved and failures everywhere they were not involved. I mean, it's like almost like an ongoing trend. So that's a short response. We are also very importantly again advocating for universal service funds to open up to Persons with Disabilities because universal service obligation which was traditionally taken in terms of geographic disparities, need to be expanded to persons with disabilities as it is in many countries.

*Female:*

For people who are not familiar with the USF what it is.

*Male:*

Yes, so Universal Service Fund were formed in many countries like the United States and many states in the U.S. to equalize opportunities to access telephony in the first place. And initially because \_\_\_\_ areas where it's costly to cover than urban areas, telecom companies would actually tax like a one percent on the telephone bill, everybody and that's – those funds would go to subsidize initiatives to provide service to rural areas where it's not economically viable. And it's still going on in the U.S. on a large scale, actually.

But as mobile telephony started to cover every single rural area in the world, those universal service funds keep accumulating funds and you are talking about billions of dollars sitting in Brazil, sitting in India, which can be used, technically should be used for other forms of disparities in access to telecom. I think access \_\_\_\_ possibilities is a very legitimate aspect of Universal Service Fund, especially now that CRPD has been ratified by those countries. So they must change the charter of the USF to open it to persons with disabilities.

We actually wrote a little book on that. It's available for download on our website, so it's – anyway, so it's knowledge motivating stakeholders, giving the legal tools to make it happen, essentially our strategy.

*Female:*

Okay, so we don't have a formal five to seven year strategy. But I think the pilot that I just mentioned in Kenya is an important beginning. We want to use, we want to look at Kenya. We want to see what comes out of that. We want to see if we can then replicate that in different parts of the world. I think it's also important to just say that well, we have been discussing today mainly mobile money, mobiles are used for a whole range of other things in terms of development. And so, USAID is supporting the use of mobiles for maternal health, for instance. That's an area that we would like to influence. We're looking at ICT and mobiles for education.

Again, that's an area that we would like to ensure that the disability perspective is included. So our approach is that as the agency continues to use mobiles for development that within that, we ensure that disability is included and then we have a workshop that is happening in the summer in Bangkok that Maria may want to talk to you just briefly.

*Female:*

Yeah, so we have a workshop. It's kind of the first of its kind. It's a U.S. government facilitated workshop. USAID, the main players are USAID, two offices within the treasury department and an office within the department of justice. FDIC will also be participating. Fed Atlanta will be participating virtually and Charlotte will be one of the presenters at this workshop. It's a three-day workshop that's going to be really packed, the second day will focus on development issues related to emerging payments technologies including mobile.

But at each point along the spectrum when we talk about mobile, whether it's from a legal, regulatory, consumer protection or enforcement angle, we'll be bringing in the discussion of an appropriate and a recommended role for all the key stakeholders including the regulators. So Charlotte will bring this entire discussion to – we're up to eight countries now, Charlotte. Mostly Asian, there are two non-Asian, but mostly Asian and Southeast Asian region countries will be convening for this event.

*Female:*

And then the second question in terms of looking at the demographics. I mean 15 percent is a large population by any stretch of the imagination. Fifteen percent of persons with disabilities is larger, for instance, than the indigenous population. So this is a large population. So what are the three key issues in relation to that large population. Well, I think the first thing is the recognition that population is there. So it's just an awareness about the fact that you have in any given community or country 15 percent of the population.

And, you know, Axel said earlier on that you know Brazil skipped in ten years from three percent – one and a half percent to fourteen percent. I've worked in post conflict countries where you know disability is visible and you look at their percentages and it's 1.3 percent. And you're thinking, "Well, is that 1.3 percent of land mine survivors or is that 1.3 percent of your entire population?" So not to digress, but I think the important piece is to recognize that this is a significant population and therefore, you need to be aware that it's out there.

I think the second point is to – the second most important piece is that now with the convention on the rights of persons with disabilities that mentions

accessibility as I demonstrated thanks to Axel's work, there is a legal obligation to actually include persons with disabilities. So now there's a legal framework that – a legal obligation within a framework that's required. And then the third piece I think is that it just makes good business sense. If you can tap that part of your population for business, just for business reasons it's important.

And then of course Maria had alluded to the human capital piece as well and the economic dividends that you get from reaching that piece, but that population, so I mean I think those would be the three key areas that I would look at in relation to this large demographic.

*Male:* And Charlotte, if I just jump in there, speaking about the users, it promotes all disabilities, it promotes brand loyalty or loyalty to a service. For instance, I do online shopping. I use certain sites because they're highly usable. So I'm committed to them because of that reason.

*Male:* I would like to also add one thing which I had a question earlier on the DoCoMo statistics in Japan and I forgot one important information. That is that here is independent validation by the ministry of information in Japan which measures the penetration of mobile phone in the population. So during those years when DoCoMo and probably some other competitors started to address the market of seniors and persons with disabilities, the percentage of adoption of mobile phone by persons over 70 years of age went from 30 percent to over 70 percent.

*Female:* In one year?

*Male:* No, no, in five years. So it proves that independently measured, irrespective of the numbers that come from the service providers, the country actually saw a huge up tick of adoption of mobile by person with disabilities and seniors, for sure, because the providers started to divide marketing.

*Female:* My name is Ann Hayes and I'm with Perkins International and thank you guys for all your presentations and Perkins works in 65 countries around the world

and we work with predominantly though we work in many different types of disabilities, people who are blind.

This has been of interest to us and we've been talking to some of our partners on the ground just informally and getting a sense of how many people are using phones. It does seem that there's not information out there and there's also not information if people are using phones, but access to smartphones and even the small cost, what that means for someone who has very little employment and how do we deal with that hurdle looking forward? The other thing that we kind of started with our discussions with our partners is, well, how many people are using banking?

And how many people have even been received information about the benefits of banking and that might be a step as Axel used sort of mentioned in your meaning about the lack of education, the lack of education, the lack of access to sort of the benefits of banking and would people be more inclined to do banking if it was accessible to them. And if we look at going back a step, how do we prepare people to not even get further left behind and also how do we then look at the possibility that it seems to be the smartphones that have the most accessibility and if you are in rural Kenya, you're happy to have a phone. How do we bring them along and also not have that be another level of possible exclusion in the future?

*Male:*

It's a big question and I would like to mention a few anecdotal things. First that it looks like persons who are illiterate start to use SMS. So the mobile phone becomes like such a useful tool. There is something happening that people start to have some basic understanding of how to deal with messages. So I can't tell you any statistics on it, but this has come back quite a few times saying people are. They are – to me, the most significant barrier is with the deaf community because in most countries, the only communication available for persons with disabilities in most developing nations I mean is local sign language.

And so that is a real barrier because there is no way around it. In Tunisia, they have put together a very interesting software which is used by Tunisia Telecom, actually Google just awarded their technology prize for this application a few days ago. And you send a text message, an SMS to a deaf person.

The deaf person has a telephone number that is identified by the service provider as being a deaf user. So when the SMS goes to the server of the telecom operator, that SMS is translated automatically into an MMS which is a small animation with an avatar that does the sign language communication to the deaf user. So, that is actually in operation today.

It works quite well. I've got a little video on it and so on and so forth. It was done by the University of Tunis. It's open source. The software to actually design the gesture and the facial expression and the gesture is open source and open to anybody who wants to use it around the world. And I think it's one way – it's not ideal because I know deaf persons hate those things because they value the human gestures.

On the other hand, in many cases, it can be a lifesaver. So, that's one way to overcome. The other thing I would like to say is that there is not ample evidence that there is a massive entry of mobile phones in education. So, I would refer you to the latest \_\_\_\_\_ and company report on that topic, which was released two weeks ago, which was the actually developed for the GSM association. I think you will see a huge up tick of smartphones, tablets, everything \_\_\_\_\_ increased and two or three years down the road, you will see that mobile technology in the classroom everywhere. That's my best guess.

*Female:*

Yeah. The other thing too is I think the cost and you eluded to this earlier, Axel, the cost of the Droid and its underlying I guess Google operating system is really coming down. So, there – again, this is anecdotal, but I've heard that just like there's a thriving secondhand car market in most parts of Africa, certainly east Africa. I was part of it once. I got a great reconditioned Toyota Camry for \$6,000.00.

Similarly, there now apparently is a thriving secondhand smartphone market. So I would – which has its pros or cons. I mean, you want to make sure that folks actually can use and optimize the features that we've talked about today. But I think we're going to start seeing a lot more of the Droids and those types of phones in that market in the very, very near future.



*Male:* One last example I would like to give. Last year, or a year and a half ago, we went to visit the head of the universal service fund in India and he and his team were very open to do some pilots in India for mobile phones for persons with disabilities in rural areas because they have still that rural area charter. But they say we can deal with \_\_\_\_\_ this has to be in rural areas. So fine, let's do it this way. And so we helped them design a \_\_\_\_\_ phone service providers to benefit from their subsidies to do those pilots. And it was like a million dollars. It was not insignificant that they offered publicly on their website and the \_\_\_\_\_ all service providers. There was not one expression of interest to do a pilot.

*Female:* Wow. Now, I was just thinking about Anne's point around how do we know how many people with disabilities actually use cell phones and we haven't been able to capture that data. Not that I'm aware of, but it's not different from most areas of disability. We just don't have the data. And that's something to think about, you know, how can we begin to do that/ is that something that service providers could do? I mean it's something we need to think about, how do we capture that data? I don't know. Do you guys have any ideas around how to do that?

*Male:* Just speaking from being affected by a disability, I think a lot of the issues surround, it's very difficult because you essentially have to self-identify that you have a disability. So if I'm getting a call from somebody asking about my disability, I'm immediately the red flags go up 'cause I'm not sure why they're doing this. And if it's anything to do with employment because there's so many people unemployed or partially employed is you're afraid it's going to affect your job.

*Female:* Right, but I was thinking more around if you get a contract, if you put onto the contract, if you had on like on the contractual form, will you require accessibility features. Check the box. If you check the box that you do require accessibility features, well, it's not so much that you're disabled, but there's a functional issue there. So it's disability in its largest sense. And then you could possibly look at that as a method of tracking how many people are actually using or require accessibility features as opposed to saying, "Do you or do you not have a disability?"

*Male:* Actually you're absolutely right because the airline industry, when I do an online reservation, there is a drop down box that asks me if I would require assistance if I'm blind, if I'm so forth. Some are more specific. Some are less. So that would be a way to track that too.

*Male:* So, one thing that we may do actually later this year is to try to do a first estimate of how many license of mobile apps have been downloaded by persons how require accessibility features. So for example, some of those apps publish their statistics, like apps for Android, for example, which is a collection of accessibility apps. So, my guess is by looking at the revenues and maybe self declaration of several companies, we can find out how much is happening. And it's sensitive information.

Service providers won't communicate it, but we may be able to make an estimate. For example, if I think I can determine how many Android operating system apps for persons with disabilities are being downloaded because that's pretty much – that \_\_\_\_ available. If you then extrapolate saying that Android is half of the marketplace, then you can double that and say, "Okay, well, this is roughly what may be happening in the marketplace right now."

*Female:* But I think the harder data to get is going to be the rural young, maybe rural girl who will never have access to a phone because maybe they'll think, "Well, why does she need a phone? What would she need a phone for? Why does she need banking services?"

*Male:* For the school.

*Female:* Why does she need school? I mean, that's going to be the harder piece to get at and I'm not sure that a mobile network operator service provider is the most appropriate. I mean they're a piece of the puzzle, but I'm not sure that they're the best equipped alone to reach that population. So I think we're going to have to get at this from several different angles.

*Female:* And then I just wanted to throw out the point that you know, just because a disabled person owns a phone or has a license for a phone does not mean that they're operational, that they're actually using the phone. I have seen many times particularly blind people where you will have their assistant or somebody else read their messages, a family member read their messages back to them. And there are a whole lot of issues there, you know, privacy issues and security issues. So I mean I think we always need to be careful that just because somebody has a phone doesn't mean that they have full control and independence over how that phone is used.

*Male:* And to both your and Axel's points, the apps that people download, there needs to be sort of a vetting issue going on. Apple's very good at requiring the developer to build in accessibility features. So, I have experience where I've downloaded apps that were virtually unusable to me and that's frustrating. So people can get frustrated. So there needs to be that kind of intermediate level too of these are the requirements to be accessible and then we'll post them on iTunes, or so forth.

*Male:* So the folks at Google did a good job, I think, with Android 4.0. They have included many more accessibility guidelines for handset manufacturers. They are requiring the handset manufacturers to use that next series of Android 4.0 to either adopt the entire suite of accessibility features or to provide alternatives, technical solutions to achieve the same. So we should see with Android 4.0 a better level of accessibility overall.

*Female:* If I could jump in just with a question. Sorry for being selfish here, but there's an FTC conference in town, I believe on April 29. I'm not sure if any of you are involved in that, but I remember getting an e-mail that showed the types of topics they're going to be covering and I believe I shared that with you, Charlotte. And I made comment, they were calling for comments and I made comment and one of my initial comments was there didn't seem to be any room in the discussion for a lot of the issues that we're talking about today.

So that's number one. That's FTC. And the other thing is I'm still trying to clarification as to what a possible role will be for the Consumer Financial Protection Bureau on these issues. And I still don't know. Is there a specific

designated office that's going to address these types of issues within a financial services protection context? I don't know. Maybe you know.

*Male:* We have on June 4 and I've been \_\_\_\_ the invitation and the \_\_\_\_\_ for the next few days, but on June 4, 2012, so it's – we do have that session at the FCC which is half a day session strictly on mobile accessibility issues. Kind of an update of the summit from last year. And I'd be, of course, very happy to share as much as feasible. FCC's very gracious in hosting those sessions, I must say, and has been very hospitable to international regulators and folks who came to town last December.

*Female:* I have one more question from Indra. So this question is for Douglas and Axel. How are social venture capitalists, social entrepreneurs and mobile technology inventors been engaged to facilitate accessibility and to include affordability for persons with disabilities in remote and rural locations?

*Male:* Axel?

*Male:* The characteristic of the apps market right now is that you see a lot of those apps developers working with very little means. They are all very small entrepreneurs with a few exceptions that have an idea and then develop it and they put it on the app store and that's their main business model.

And then you have a few companies who have a more substantial development team like Code Factory, for example, which is one of the better known that actually have a sales force and sell to service providers and so on and so forth. But it's a very, very entrepreneurial and in many ways, the problem I see right now with apps for persons with disabilities is a lot of those developers have an unsustainable business model for the long term. So my concern is those apps come out, and then they are not eventually going to be maintained over time, which is a big issue.

And so if you take the example of \_\_\_\_\_ for example, that's a good case, they are very successful and I hope that they will grow over time. But when you sell an app for 99 cents or \$1.99, how far can you go even if you sell a lot of those.

So, that's the issue. I think on the app stores, one of the big issues for persons with disabilities is they cannot differentiate between apps with high added value from apps with little added value and they are all kind of priced at that price. So you don't know how to choose the Toyota from the Rolls Royce. You know?

So now going back to the question of venture capitalists, I have seen a few attempts in the past of venture capitalists trying to address the market of ICT accessibility. But I have not seen much success and I would love if anyone knows venture capitalists that are interested in that space, we would love to talk to them. So please do not hesitate to bug me because we have a lot of ideas, a lot of opportunities.

In fact, also I want to mention that some of the companies that are critical to our space, like speech recognition, companies like Nuance, for example, those are very large companies. They are like thousands of employees, huge organizations, worldwide footprint. It's a different story. But because they address all kinds of different markets, not only the accessibility market. I don't know if that answered the question, but –

*Female:* Thank you so much. We have to conclude. Maria, do you have any final points before we –

*Female:* No, I just think that I've certainly learned a lot from the discussion. I think there's still a lot more to learn. We need data. We need information. We need collaboration. We all need to put our heads around this issue and come up with some good solutions and I think one of the key takeaways that I'm getting from this is that we shouldn't look at working with the disabled population as a niche market. It's not a niche market. These are our neighbors. These are our colleagues. These are our families. So, I think if we think about it in that regard,

it puts certainly for me, this whole issue in a much brighter and meaningful context.

So thank you for joining us. Thank you to all of you online for joining us. Let's keep the discussion going. We will not be having a seminar next month because we're getting ready for that workshop in Bangkok in June and we will resume in September. Topic is under development and we'll have a lot going on virtually during that interim period. So again, thank you very much for your participation.

*Female:* Thank you.

*Male:* Thank you.

*[End of Audio]*