

Spoke media.

KELLY: Hey Bob.

BOB: Hi Kelly.

KELLY: It's time for the first mini set of season two and I'm so excited. So for those of us who may have forgotten, Bob, could you explain to us what we do in our minisodes?

BOB: Sure. In minisodes I attempt to answer earning tech questions that you the listeners send in either through email or Twitter, Facebook, however you get in touch with us.

KELLY: Exactly. Okay, so here's our first question.

ALISON: My name is Alison King and I'm calling from Drexel Hill, Pennsylvania. So Bob, I recently won an Amazon echo plus at an event I attended. My boyfriend insists that we should not let Alexa into our home because she'll listen to slash record everything we say. I'm tempted because I want to have a smart home or at the very least be able to turn on my favorite podcasts hands free when I'm cooking. Is it true that Alexa is constantly on and recording incriminating audio snippets? I've heard the rumors, but want the truth. Am I destined to have a dumb home forever? Thanks.

KELLY: Bob. Please tell us you have an answer for us. I think about this literally all the time and it's the reason why I don't have Alexa in my home, but also I don't know if I have any reason to not have an Alexa in my home. So do you have an answer for us?

BOB: I do and we'll hear about it right after the break.

[AD BREAK]

BOB: The first part of the answer is I don't want to do anything that would get in the way of somebody listening to this podcast while they were cooking. So happy cooking. Okay. The truth is this is a complicated subject and if you are really concerned about companies like Amazon or Google or Facebook listening into your conversations, then you probably shouldn't activate any of these devices. I call them smart homes, call them whatever. But right now everybody is outfitting their homes with microphones and microphones are really tricky. On principle, here's how these things work--and this applies to any of these smart home devices like the Amazon echo plus. They lie there dormant listening only for what are known as awake words. So Alexa, all of a sudden Alexa then wakes up and then starts listening to you slash recording you. So on theory, most of the time in your life, it's not recording and Amazon isn't storing copies of your conversations that you have privately at home. However, there are numerous examples of this not working the way it's supposed to and anyone who has an Alexa device knows those

awkward moments when you're just having a regular conversation and Alexa butts in and says something like,

ALEXA AUDIO: I'm sorry, I don't understand

BOB: Which means she was listening. And there's more to this story. There's been several instances like what happened recently with Facebook, which is Facebook says that human beings never listened to your conversations and they don't turn on your microphone and all those kinds of things. But recently Facebook was found to have been using human editors to listen in on audio recordings. And this happens all the time, because technology isn't infallible. And they were doing quality control to see how well their voice recognition was working. So they had a staff of people listening to recordings, Oh by the way, that means they were listening to you, and you were unaware they were listening to you. Now this was a small sample of people but it still demonstrates how tricky it is when you have a device in your house that someone could rightly think of as a spying device, a microphone that kind of wire taps you and I use that term loosely. It's a legal term, but if someone is listening to your conversation and you don't realize they are, well that's sort of an illegal wiretap and how you control those devices is very, very tricky. Just to give you a sample of the kind of information that may or may not be out there with you, Google is at least pretty transparent about this and there's a page on Google where you can look at all of the audio that Google has recorded from you and it's going to be mostly times when you use their voice recognition say to speak a quick text message into an Android phone. If you just go to myactivity.google.com you'll be able to see a list of the audio files that they have on you. And you can probably play them and you'll probably feel weird that some were on a server at Google are all of these things that you said. You can also delete them there and you can opt out of this if you want to. But the short version of this story is, the minute you put a microphone in your house and you say it's okay to record me, well then unexpected things could happen with those recordings and with your conversations.

KELLY: Okay, so I've also heard that the police can use Alexa in investigations. Is that true Bob or am I just like making that up?

BOB: Yeah, I've written about that there was a murder investigation where police subpoena the Alexa records hoping that there might be some kind of additional information on those records. And of course they would. I mean, if you're investigating a crime, you look for every piece of evidence that you can find and you know, odds are there wouldn't be any evidence because Alexa would be quote unquote asleep. However, again we know that it's activated accidentally sometime and if there's a, let's take it out of a specific situation, but imagine a domestic dispute and a lot of yelling and screaming, it's entirely possible that one of those words could be misinterpreted as as a command for Alexa to wake up. And then there would be a recording that could be used as evidence in a court case. And there's certainly nothing preventing police or for that matter, uh divorce lawyers from using Alexa files in a court proceeding.

KELLY: Interesting. So that is saying that data is being harvested and collected and just sitting there somewhere then, right?

BOB: Yeah. Well it's, it's sitting on Amazon's cloud essentially or Google's cloud or Facebook's cloud. All these recordings, the devices in your home are not nearly large enough to store them. So they're immediately uploaded to a device that's controlled by the company and the device is controlled by the company. They're obligated to follow laws. And if an officer of the court comes along and says, give that to me and uses the right procedures, they have to do it.

KELLY: I'm interested about what you said about Facebook testing their audio recognition software. So did those samples of people, did they get a pop up saying, do you consent for us to do this, to collect this audio? I'm assuming not.

BOB: Well it was a generic consent when you were using their voice recognition tool. And this happens all the time. There's a similar example with Ring video cameras. So Ring uses image recognition to see if there's movement and then so it can wake up and tell you, Hey, somebody might be putting a package on your front porch or stealing your package. But computers aren't perfect. And sometimes the Ring cameras would trigger when a leaf blew by instead of a person. So they hired armies of people to review the video and help the artificial intelligence software learn the difference between a leaf and a person. So this is what Facebook was doing with audio files. They wanted to double check how their AI interpreter was doing. And so they hired people to double check the work and they anonymize the files theoretically. But again, this is one of those situations where you're talking into your phone thinking you are just using a simple speech to text translator, and next thing you know some person in some other part of the world is listening in on your conversation and that should make you feel weird and cautious. And of course, I think part of the problem here is Facebook has had several privacy and missteps, several very high profile privacy missteps and had repeatedly said, no, we're not listening into your conversations. And then here is an example of them listening into your conversations. So that's another hit to their credibility. And it's another reason to make you think, you know, what else is it that they might not be telling me about these audio conversations?

KELLY: Yeah. It also makes me think, what else are the other companies like Amazon and Google not telling me, you know?

BOB: Right. Of course. Yeah. I mean, I think what people are worried about and there's these persistent internet rumors and they're more than rumors. Lots of people believe it. That you know, they talk about something in the presence of their friends without them being on their phone using their phone or in a phone call. They just have a conversation in the room about some product and next thing you know they see a bunch of ads for that product and they blame Facebook or some other internet entity for listening in and course all these technology companies, Facebook specifically, they denied it before Congress. The rumors keep persisting. It's one of those things that has went around Facebook about once a month that comes up as a big deal there. And I have no reason to believe no one has presented evidence to me that Facebook is surreptitiously recording people and serving ads based on those recordings. But I think the explanation for what's happening there might even be darker than that. The

explanation is, that Facebook knows you so well that if you just casually mentioned a product in passing to a friend, the other interpretations it makes of your online behaviors, the stuff you click on, the ads you click on, the searches you do, it adds all that up and it can figure out what you might've been talking about to your friends and serve you appropriate ads. So the machine itself knows you so well, it doesn't have to spy on you with an audio recording. It can just figure out who you are and what ads to send you without doing so.

KELLY: Oh it's so freaky. So if we're talking to Alison, she's worried about having this echo in her home, what would you say to her? Do the benefits outweigh the costs?

BOB: I mean, first of all, I would say a couple of things. These smart homes are fun and useful and lots of people have them and it feels like a tidal wave that it's just going to overwhelm us. However, the first thing I would want you to consider, Alison, is if your boyfriend is worried about his privacy, I wish that you would respect that and not use these devices in his presence, at least because he has that option. Everybody else can make their own choices about whether the risk outweighs the rewards. Smart homes are cool. It's cool to be able to turn on your phone while spinning tomato sauce. There's some really helpful functions. Like I start my car now with my app that way the air conditioning runs for a couple of minutes and when my dog gets in, he's not in danger of heat stroke because the car's already cooled down for him. So you know, that's a risk that I take that Subaru knows when I'm getting into my car. But it is a risk and I think it's legitimate to be concerned about it. And I think, you know, the thing to really do is ask yourself, do you trust this company and whatever version of this company might exist five or 10 years from now to respect your privacy? And if you can't really answer that question positively, maybe that free gadget that you won is really just the Trojan horse into stealing more of your privacy.

KELLY: Yeah, very well put.

Special thanks to this week's listener, Alison. I hope you can still listen to So, Bob while cooking, even if you decide to maybe not have an Amazon echo in your house.

If you have questions about your digital life, write to us or send us a voice memo at sobob@spokemedia.io or tag us on Twitter @SoBobPod. Who knows you may be the star of our next minisode.

So Bob, as a spoke media production

It's hosted by Alia Tavakolian and Bob Sullivan.

It's produced by me, Kelly Kolff with help from Reyes Mendoza and Tre Jones.

This episode was mixed by Alexander Mark

Our head of post production is Will Short

The songs you heard in this episode come from FirstCom

Our executive producer is Keith Reynolds. Thanks for listening.