

## The Future of 5G at Events - Event Tech Podcast Episode 5

**Intro:** Welcome to the Event Tech podcast, where we explore the ever evolving world of event technology every week. This show is brought to you by Endless Events, the event AV company that doesn't suck. Now, let's talk tech.

**Brandt Krueger:** Hello everyone and welcome to the Event Tech podcast, I'm Brandt Krueger, Event Technology Consulting. He's Will Curran, Endless Events. How you doing, Will?

**Will Curran:** I'm doing fantastic back home in Phoenix, Arizona where it's nice and sunny today.

**Brandt Krueger:** Well today we're gonna be talking about, as we're recording this, we're actually watching the news coming down from Mobile World Congress, which is the great big expo with all the new, latest mobile phones coming out. And we actually, we're already in the process of putting this show together. And we wanted to talk about 5G, that's the big buzzword that's going around, right? 5G and the future of mobile in events.

**Brandt Krueger:** Now, we kind of had the first, initial mobile revolution back with LTE and 4G technology, and that's really, you know when you look at the event business, well that's when things started to really take off as far as-

**Will Curran:** Oh my gosh, yeah.

**Brandt Krueger:** -event apps and interactivity apps. It was kind of the app revolution of about six, eight years ago when things really started taking off?

**Will Curran:** Yeah I mean, and blowing up too, high definition phones, or high definition videos straight to your phone, pulling from the air. And just the ability for you to basically connect anywhere in the entire world at any given moment, and basically not have an issue about internet quality.

**Brandt Krueger:** Yeah, so we wanted to kind of break down the buzz around 5G, talk about what it is and what it isn't. And what we think the possible implications are for mobile, the use of mobile in events. And then also kind of tackle some of the fun news that's been coming through over the course of the last few months. What are we looking at regarding phones, regarding Apple's latest phone, Samsung's latest phones, and now even while we're recording this, we're starting to find out about some of Huawei and some of the other manufacturer's phones. So we've got a lot on the table for this episode.

**Will Curran:** So much to cover, for sure. Well let's start off with like, what is 5G and why should we even care, to be honest? I'd actually look it up, because I wanted to confirm its speed. But I figured, let's like rewind back so people can understand the jumps in speed. Whenever we talk about this, we'll be talking about megabits per second. So let's rewind the clock and go back to

the beginning of when the mobile revolution happened with like 2G or edge networks, right? And I'm looking at a quick chart on here and it says, .3 megabits per second, in terms of speed. Which seems archaic now. That's what?

**Brandt Krueger:** .3, yeah.

**Will Curran:** .3, so it's like 300 kilobits per second, basically?

**Brandt Krueger:** Yeah, I think that does right. Somewhere in there. It's slow.

**Will Curran:** Super slow. But then we saw this big jump, and I remember this was when I first bought the iPhone which was when it came out in 3G, which was a big jump up from .3 megabits per second to 7.2 megabits per second. Like, that is a humongous jump in terms of speed. And I remember for the first time I ever, this is when I knew the future was here, as I tune into it in a radio station while driving down the freeway, and was pulling music from the air. I mean, just like absolutely mind blowing to me.

**Will Curran:** But then we see the next big jump up, which is to 4G, as you kind of talked about that revolution, however many years ago it was now. We went from 7.2 megabits per second to 150 megabits per second.

**Brandt Krueger:** Which no one has ever seen, ever.

**Will Curran:** Yeah.

**Brandt Krueger:** -capable of-

**Will Curran:** That's a really good point.

**Brandt Krueger:** But that doesn't necessarily mean.

**Will Curran:** Theoretical limit when it comes to it. And then now we're starting to see there's like 4G LTE A and all these variations of it or whatever it is. But I think the next big jump will be obviously to 5G. Which, in its theoretics is at one to ten gigabits per second. Again, we're going from 150 megabits to one to ten gigabits per second. And you can see, some people might be saying, that's faster than my home internet, for sure.

**Brandt Krueger:** Oh, yeah.

**Will Curran:** So we're gonna see a huge jump up on it. And I think the amazing thing about 5G and the excitement around it is it's not just about phones. And while we talk about mobile, the huge application I think this is gonna come that we're gonna say a big jump through is gonna be moving to- this being implemented at the home. Instead of you having to get fiber internet

installed at your home, or cable fast internet, instead you just put a modem, and it will pull it straight from the air. And I think that was mind blowing. But one to ten gigabits per second.

**Brandt Krueger:** Yeah, yeah. Like, we've been offered gigabit speed at our home, like repeatedly for \$20.00 more a month. And I haven't been able to justify it, because we're fine, right? We haven't needed anything faster than- I think we've got like 40 to 60 megabits per second on it at home. And that's with everybody on their tablets watching Netflix simultaneously, it doesn't choke. So yeah, now imagine, so yeah, the huge jump. And then thanks for running through that kind of little back history, talking about these evolutionary jumps. Where, imagine everything that came about because of being able to get that 4G pretty much everywhere, with the exception of some venues and convention centers and things like that. That's really what brought on this amazing mobile revolution of again about six eight years ago. And everything that's come out of that, including all of the apps. Including the Niantic, like Pokemon Go, all of that stuff is all streaming over this LTE network.

**Brandt Krueger:** Now, take that speed, make it not just double, not just triple, but tenfold higher, and imagine what we're gonna be able to do. And that's what's really got people excited. So about 5G. Now a couple more kind of dumb it down things to know about how this is gonna work. So, 5G is gonna be just a different kind of radio signal. It's gonna be- but it's a type of radio signal that goes a much shorter distance. So, we're gonna have to have a lot more- Now the good news is, is that the towers and stuff and everything, the transmitters are all a lot smaller, but they go a lot shorter distance.

**Brandt Krueger:** So, you're gonna have to have a lot more of these 5G transmitters around in order to get 5G everywhere. Now, so that's just something really important to bear in mind. That when we start talking about when is 5G gonna get here. They're starting to release 5G capable phones. Well, that's great, but kind of much like, let's think back, remember what it was like when LTE, when 4G first came out. We have to remember, it was not everywhere. So it first starts showing up in the major cities. And it's like oh cool, sweet, I'm in New York and now I can get 4G. When's it coming to my city? That kind of thing. It took a while. It took probably a couple years.

**Will Curran:** I vividly remember that, too. Because my buddy Brandon whose like, him and I are really geeky about phones together, and we're always talking about like, "Oh, did you see this new phone, this new phone?" We're always having the newest version. And I remember back in the day, his phone, I want to say maybe it was even his palm pre back then, is that it got 4G, and had the ability to 4G through Sprint. And Sprint was the first carrier to say, "We're gonna have 4G available in 2009." I mean 2010, or whatever it was. And I remember we were so excited because we were like, "At any second you're gonna get it, and it's gonna be amazing, and it's gonna be fantastic." And he waited, and waited. And it was something like two years before Phoenix finally got it. And ironically, Sprint wasn't the first to bring it. It was like Verizon, and the only time he got to experience 4G was like in Europe, or something like that.

**Brandt Krueger:** Yeah, exactly. And so, I want to kind of get this out of the way early before we get into the good stuff of what's gonna bring it. Because I just want to throw a little bit of water on this fire, because everyone says, "5G, 5G, 5G, 5G," and I want to be really clear with folks that it's gonna be awhile before we get to the point where we are with LTE. I mean, we're still not even there. I mean, there's so many cities and areas out in the country that don't even have LTE yet. And this is a system that's gonna require more transmitters at shorter distances in order to be able to get these kinds of speeds.

**Brandt Krueger:** So, it's going to take a while. It's not gonna just wake up tomorrow and have 5G in our phones. Even in the big cities. So I think as we- we're gonna start to see it over the course of this year, start to roll out in some of the larger cities, just like we did with LTE. But even then, it's gonna be limited in an area, because of the way that these transmitters work. So, I just kind of want to get that out of the way early, that people need to just slow their roll a little bit. It's not gonna be coming out tomorrow, and you don't need to rush out right now and get a 5G phone.

**Will Curran:** Yeah, you bring up a super duper good point. In fact, I don't remember exactly which carrier, I think it's AT&T, don't hold me to this, but AT&T I think just got sued by pretty much every major carrier because they started saying, "Oh, we have 5G." But really, it's an enhanced version of 4G. And so they're advertising saying, "5G speeds, 5G speeds." So everyone's saying like, "Oh wow, this is definitely false advertising when it comes to it for sure." But yeah, I mean even the applications of 5G. I believe it was, I'm spacing. Maybe it was at CES, there was a couple companies doing demos of I think like Qualcomm for example, of 5G speeds and saying like look, we have demo phones. Here we have a demo setup of 5G, but it's in a controlled ballroom. People said like, it was obviously extremely controlled environment, that like you could see the antennas, you had line of sight with them.

**Will Curran:** So, while it's amazing and so fantastic, I mean we definitely are in the infancy stages of this for sure. But that's what this podcast is all about.

**Brandt Krueger:** Yeah, it really is. So yeah, it's great to be excited about it, and that's what we can kind of go into here is, what is this gonna mean for our technology. But make sure we understand that this is gonna be a rollout that's gonna take a while. And that's even more complicated by some of the relations between the U.S. and China. And you know, we don't want to get too deep into it in this episode, but it's not just the trade wars or anything like that. It's this drumbeat of, we can't necessarily trust technology that's coming from China. And one of the biggest providers of 5G technology is Huawei. And Huawei is being accused by security organizations- you know, the security folks are basically saying that Huawei is putting the ability to shut off this gear at the flip of a switch.

**Brandt Krueger:** And so, not even that they're gonna be listening or spying or anything like that, but just that they would have the ability to shut down our 5G infrastructure with the flip of a switch is what they're being accused of. So, you know, whether or not that's true or not, it's

causing a slow down in the building of this infrastructure. Which, as we've already talked about, is quite a bit more extensive than what happens with the LTE. So, that's my water on the fire. But let's get into the good stuff, and bring things back up again. Will, tell us a little bit about some of the mobile phones that have been released that are gonna be able to take advantage of this technology.

**Will Curran:** Yeah. I think up until this week at Mobile World Congress, there was probably maybe one phone that got announced that it was gonna have 5G. But it took the Samsung announcement, the unpacked event that they just had last week, where they announced their first 5G, the Samsung Galaxy S10 5G was announced. And then now, we're obviously at the conference that is all the major carriers and everything mobile basically. That's when now the floodgates are kind of opening, and it's getting deep.

**Will Curran:** But what's interesting is, this might go into a little bit of side conversation, but I think the exciting thing is actually a Huawei announcement, I mean this is just a little bit of an offshoot of excitement for me. But we're starting to see also this big revolution with folding phones as well. Where basically it's a tablet that can fold into a phone- so cool. I feel like I'm in Minority Report or West World and it's like the future. But, a lot of these phones are starting to see, instead of it just being, "Hey, we're just coming out with a folding phone," it's oh it's a folding phone plus it has 5G. If it doesn't have 5G in the next year, I think in its name, people are gonna think it's outdated. And we're starting to see some absolutely amazing things.

**Will Curran:** I don't know if we want to go down the rabbit hole of talking about folding phones and its implications for events. But I'm just-

**Brandt Krueger:** I think it's worth taking just a couple minutes here, just to talk about kind of this year's phone crop. Because at this point we've seen the majority of the big players. So, Apple revved it's kind of iPhone X phones, and now we've got the XR and the XZ and the XQ. They kind of offered the slightly less expensive version of the iPhone X that is just basically built out of some different materials. But all in all, it's pretty similar. And then you've got the giant iPhone X version. But that was kind of it. I think people were a little surprised that there wasn't more that came out of those Apple announcements. It was just bigger, better faster.

**Will Curran:** Or an iterative moment, right? Like phones are just getting iteratively slightly better, so that's when you see a folding phone it's like, oh my gosh finally, some innovation.

**Brandt Krueger:** And I think that's why people are freaking out a little bit about it. And so, and if you look at the S10's, they're also kind of iterative. So they move the fingerprint thing from the back to under the glass, which they've actually been working on for a few years, and finally got that figured out. So now you don't have to reach up and smear your camera lens as you try and unlock your phone with the fingerprint reader. You can just do it through the front glass. That's pretty cool, but it's nothing mind blowing. And they look about the same, and they're about the same shape. But now I feel like we're starting to go into lens wars, where it's kind of like razor

blades were for a while. Well yeah, well we've got eight blades. Oh yeah, well we've got 20 blades, in our razor blades. So now it's like the same with lenses. It's like Apple; We've got three lenses. Samsung; Great, we've got four. We've got eight. Pretty soon the back of your phone's gonna be like all lenses. Meanwhile Google is sitting back on the Pixel going yeah, we're good with one.

**Will Curran:** Totally, well it's funny too. You bring up the cameras, I think that most people have to realize, you gotta buy a phone with a good camera. I think far too often event professionals we get kind of locked into this idea like, oh it's just my phone, no big deal. But it's like, if you have a really good camera on your phone, you don't have to always bring a photographer out to your event. You can get some really cool close up shots of for example the decor, or some great wide angle shots of the stage and it allows you to capture some great marketing footage straight from your phone. And I think that's really important, because far too often, we don't tend to document our own events.

**Brandt Krueger:** And that's been a great part of the last few years in cell phone technology, is that it really does feel like we got into bit of an arms race when it came to the cameras. And computational photography, too, so that it's doing stuff on the backend to make your photos look nicer. I took one of the best photos I've ever taken of fireworks a couple of years ago at our local Fourth of July celebration that they still use to this day on the website. Because it was such a perfect shot. You could see peoples faces lit up by the fireworks, and like silhouetted in the background as they watched, and it's all like families and kids and stuff. And so, it was just a perfect moment. And I took it with my phone. Like I really didn't expect it to even turn out. And it's this gorgeous photo, like I said, that they still use.

**Will Curran:** You're proud, aren't you?

**Brandt Krueger:** I am very proud about it, yeah, because like you said, where you just kind of take your phone out of your pocket a take a quick shot, and if it turns out it turns out. And all of a sudden, it like turns out really, really well. You're like, that's great. And so yeah, you could start using these things for promotional photos, for well beyond just, "I want to remember what this décor looked like."

**Will Curran:** Totally, well let's backtrack too. I think one of these futures is definitely gonna be these foldable phones that are coming out. And I think one of the things that I think you'll appreciate it, is you're very much all about trying to find one device to do it all, and you've kind of settled now into two devices between your Chrome tablet and kind of the MacBook. Actually no, you went to the Windows and then plus the MacBook. I think it's really, really exciting to talk about, what does the future of these foldable phones potentially mean for computers in the future? I mean, as we're getting to the point where now hey, we're going from foldable phone, plus a tablet, plus a computer which is I think a lot of peoples set up too. Now you just eliminated the tablet, now it's phone and tablet together, and now you have a separate

computer. What's the point when the computer is gonna merge into that phone, and become this awesome foldable tablet that we see in Westworld? I just want to get to that point.

**Brandt Krueger:** Well, and yeah. There was another one of the Sci-Fi shows, I feel like it was spin off of like Battle Star or something like that where the girl took basically like a folded piece of paper out of her back pocket and unfolded it, and it was a tablet. So like, you take an eight and a half by eleven and fold it about three times, make it fit in your pocket, it was about like that. And I remember thinking like hey, that's pretty cool.

**Brandt Krueger:** For me, personally, the foldable phone doesn't do a lot for me other than, it's showing creativity, it's showing innovation, it's showing, "Hey look what we can do with these displays." From a phone standpoint, it doesn't like- Oh, I've gotta rush out and get it. But, what it does do is I've been wanting for years now advances in display technology. So it's showing me that this display technology not only can roll up- we talked about this in our CES episode, where they had the roll up TV. That it's showing me how good these displays are starting to get at being foldable, bendable and repeatedly bendable. So not just like you can bend it into one position and leave it there, you can bend it over and over and over, I think they said something like 500,000 times this phone can be bent before it's supposedly supposed to show some wear. We'll see about that. I think sometimes they get a little too into what they think how long it's gonna last. I just had to replace a whole bunch of my LED light bulbs that were supposed to last 18 years and didn't last four. So it's one of those things where it's like yeah okay, sure it will last 18 years.

**Brandt Krueger:** But again, what I'm excited about is this continuing evolution in display technology. I can't wait where we can just start putting these things together. They're modular, you make a display, whatever size you want, it can curve, it can bend, it can go around corners. And so basically, at some point, I think in our lifetime, I said this in the other show, I think in our lifetime Will, we're gonna see the end of projection. And because all you're gonna need to see, all you're gonna need to do is slap this display material on whatever it is you want to display on. And then you don't have to worry about sight lines, you don't have to worry about any of that stuff because it's just gonna be display material. And you stick it on whatever you want it to be on. And I think that's gonna be really awesome for our sets and our presentations and all of this kind of stuff.

**Will Curran:** Yeah, I mean, I will definitely agree with that, 100%. I do think that though, a foldable phone will be really good for the event's industry too because I'm just imagining like how I use my tablet now, and been using my surface book, versus a traditional laptop. Before a traditional laptop, I wouldn't like carrying it around with the sight designs and drawings and things like that one it. Now I'm imagining like boom, once I get a foldable smartphone, I won't care about needing a touchscreen on my computer, because now I'll pull up the designs on my foldable phone, and fold out my phone and show the client, "Oh hey, here's where we're gonna place this. Oh here, let me draw this on here." That sort of stuff. I think it just gives more

flexibility to youth cases on how you're gonna be able to use it. I think that's where it's exciting for me is the eventual replacement of the computer, essentially.

**Brandt Krueger:** Yeah, yeah. And who knows, is that gonna be the thing, or is it gonna be more like, not to go to another Sci-Fi trope, but if anybody's seen the Expanse series, where they've kind of got like a clear slab in their hand, and then when they need to, they kind of put it in a dock, and it becomes a larger thing, or they can kind of flip it and it goes to a sidewall. Is it more about, we've got this small thing, and then we've got other things. Or is it about something that unfolds and gets larger or something like that.

**Brandt Krueger:** You know Will, you bring up a great point of how we could use this in our industry. And one of the things that I've always been looking at is how we can use augmented reality and virtual reality on the backend, on the sales and venue management side. And so, I love this idea of you just kind of sparked me of walking into an empty ballroom, unfolding your phone and being able to bring that up over, and then overlay, "Okay, this is what it's gonna look like in theater set up. This is what it's gonna look like in rounds." And be able to walk through live there, in the room. I think that would continue to be the stop gap for augmented reality. Glasses of some kind. We continue to just be able to use our devices.

**Will Curran:** Yeah, I think so too. I'm gonna use this as a chance to pivot now towards 5G again, is how can we see 5G being utilized in this event's industry. So, like I kind of mentioned I think a little bit in the beginning we talked about speeds is that, this eventually also, is the first kind of use scenario, this isn't a replacement for necessarily just your phones. I mean 'cause we're seeing so many phones come out, but also just as a purely internet set up. This could replace your internet at your home. What do you think that 5G's gonna do for the event's industry, and how can you see it affecting this kind of like wild world of event WiFi too?

**Brandt Krueger:** Well in the short term again, we're gonna struggle with just getting it to where we need it. But very easily, I think a smart venue would want to approach the carriers and say, "Hey, what can we do to get higher on the priority list of getting these transmitters around our venue? So that then we can then promote ourselves of, hey guess what? We've got the fastest line in town and you don't have to pay a dime extra for it now."

**Will Curran:** But wait, let me stop you there, though. But then that provides- so like, obviously we're doing a lot of education of event WiFi and event networking right now. But that provides a direct competitor then to the upselling opportunity, which is the event WiFi, right? Do we worry at all that venues actually are gonna try everything they can to do the opposite and slow it down, because they're worried that "Oh my gosh, if I can get one gigabit per second, why would I ever even decide to bring in the event WiFi?"

**Brandt Krueger:** So I absolutely agree that that's what's most likely to happen. I still believe in that there's ... that smart venues will come along, and they will offer these things as amenities, and planners will see that and reward them with great business. Now, you're probably what you

say is more likely to happen. But I still believe, right? I still believe that people will come along. Yeah.

**Will Curran:** But then on the flip side of that is that, this is also a great opportunity for event professionals and event planners to say, "We don't have to rely on the event WiFi anymore." Because like right now for example, there's opportunities of bonded hotspots and things like that. I'm not gonna get into that nerdiness right now. But that's great, but requires a lot of SIM cards, a lot of- if you have a really great source, you're still only getting a max. Let's say you take four of those 4G cards, maxing out 150 megabits per second, you're still only getting 400 maybe megabits per second, 500 megabits per second. Oh, fantastic. But like, if you could do this, and have for example, HTC announced it at Mobile World Congress, is a 5G hub, or a hotspot. My gosh. Like, you're gonna see just people show up and say, "Oh yeah, we don't need the internet anymore. We'll just plug in our hotspot,"

**Brandt Krueger:** And the good news is that, at least in this country, it's been absolutely clear that the venues can't have anything to do with blocking those. So, at least we've got that going on. You know, and here's the deal, is it's gonna happen. So I mean, this 5G is going to replace WiFi, it's just a question of how far out into the sticks does it get and how quickly? So your resorts and things like that are absolutely gonna hang onto WiFi to the last possible minute because they're out of the city proper. But in the city venues, are gonna have to deal with this sooner rather than later.

**Brandt Krueger:** So again, I think the smart venue is gonna be able to come in and just have it be a perk. But you're right, they're probably gonna go kicking and screaming. But let's end on a happy note. Let's continue to talk about what this speed is-

**Will Curran:** Let's not go down to the bleak future.

**Brandt Krueger:** What the speed is gonna do. What are the things that they're talking about. And so some of the things that are being bandied around about what this 10 fold jump in speed is going to do for us is things like car to car communication. So, being able to very, very quickly- 'cause it's the speed, right? It's being able to get information from vehicle to vehicle very quickly as they're driving down the road saying, "Whoa, there's an accident up there, we're all gonna need to slow down." And then the things that are gonna more directly impact- So that could potentially impact transportation side of things.

**Brandt Krueger:** So as we think about our events, and the things that this could impact. Being able to lean more and more heavily on automation and self-driving vehicles, that could definitely impact the transportation side of our events.

**Will Curran:** I mean, a huge increase in bandwidth when it comes to video content, too. Like 4K, you can do 4K pretty decently on a 4G connection, but now it's you know, you're gonna watch videos instantaneously on your phone all day long, and with everyone moving more

towards video, I mean we're just gonna see it where high quality cameras on your phone plus 5G plus all this means that people are gonna scream for great quality video, now.

**Brandt Krueger:** I hope so, because it feels like over the course of the last few years, and this is heavily influenced by YouTube, I feel like people are okay with crappier video quality right now. Like that even came up at an event, where we were really obsessing about how a video looked, and we kind of looked at each other and we're like, "Nobody's gonna care." It's one of those things where people just don't care as much as they used to about edits, we're used to jump cut edits and things like that at this point. So I hope you're right, that maybe because of the speed and the quality that can come with that speed, maybe folks will kind of start to demand again higher quality video. You mentioned the augmented reality side, that's the other thing that they're saying that this technology is gonna be able to do, is that virtual and augmented reality is gonna be so fast, and such high quality that you'll be able to stream it, almost instantly.

**Brandt Krueger:** So as we start to think about our virtual audiences, and so not just being able to sit in front of a desktop and watch a little window into the live event world. Really being able to pop on a full VR rig and be there as part of the event. And really have that feeling in real time. I mean, God knows, we're still struggling when it comes to our virtual audiences with the lag that comes between what people are saying in the room and trying to get audience response questions and things like that. We're still at a solid 30 second lag on a lot of that stuff. And that can be just brutal if you're trying to actually engage that audience.

**Will Curran:** Well, it'll be really interesting too to see, I'm not sure for anyone who's out there actually watches this show Silicon Valley, but they talk a lot about like compression, how compression's kind of the future, and how we need to save on bandwidth and everything like that. But I mean with us getting a gigabit per second on our phone, I'm wondering too how this will also affect sizes of files? For example, now it will be- for example, you get done with a show, you're gonna have like a terabyte worth of video content. Now it's like, oh my gosh it's gonna take me forever to upload. Well, it's ubiquitous that everyone, a gigabit is kind of the standard. Are people all of the sudden gonna say, "Oh, file sizes don't matter." So does that mean apps are gonna get more content rich? Are people gonna be okay with sharing files faster between each other? Only time will tell.

**Brandt Krueger:** I think the answer to that is yes. They're now one terabyte SD cards. It's one of those things where storage is just becoming more and more ubiquitous, but we always find a way to fill that storage. No doubt, that we're able to create and generate content that's always gonna take advantage of those speeds, and always take advantage of the storage capabilities. What are some of the other things Will, that maybe you've heard about, what's coming with the potential of 5G?

**Will Curran:** Oh my gosh, you're really picking into me I think right now about like what is possible. Because the possibilities really, truly are endless. No pun intended. But I think one of the big things that we're gonna see as well is that, I don't know, I just feel like the- I almost just

think about the freedom of internet. I think that's like the biggest thing, is gonna be the biggest trend when it comes to this 5G stuff. Is that people are really gonna truly like, it's gonna be no longer like- for example, I have a gigabit per second at my house because I found a way to justify it unlike Brandt. And so like, some people go like, that's ridiculous, I can't believe you have that. And then I get half the mix of like, "Wow, that's really cool."

**Will Curran:** But most people are just like, that's excessive. Well, once it becomes the standard, what's the future gonna look like as well? It's funny, because you got a one gigabit per second, now I'm gonna want 10 gigabits per second in my house, right? And so on and so forth. But it sounds like you have an idea for where this is gonna go. I obviously have no idea.

**Brandt Krueger:** Totally put you on the spot on that. And I enjoyed every second of it. It's pretty cool. For me, I think it's fun to speculate, but honestly, we don't know. I mean, who could have predicted what we've seen over the course of the last 10 years because of that jump in speed from 3G to 4G LTE. Who could have predicted the augmented reality apps and the dating apps and the games and all of this stuff. Lyft and Uber, I mean a lot of that has to do with the fact that we were able to connect to a network quickly. It's going and checking all of those vehicles and where they are and GPS and all that kind of stuff in a fraction- it feels like forever at the time. But in reality it's like less than a minute, it's going and getting all that information and bringing it back. Who could have predicted all of that?

**Brandt Krueger:** So I'm really fascinated by what's gonna come down. And it's not gonna be you and I that are coming up with this stuff. It'll be the next generation of coders and kids that are coming up, and figuring out ways to take advantage of it. It's always the ones that are the second generation, when it comes to internet and technology. It's gonna be the ones that are steeped in it, that are the ones that come up with something new and exciting. So, that's what I'm looking forward to. And that's gonna be 15 years down the road. It's not gonna be now.

**Brandt Krueger:** Maybe I'm underplaying how fast it'll get out. But that's my understanding, is that you need so many more of these transmitters, and it's just gonna take as long I would think as we have with LTE in order to get full rollout.

**Will Curran:** Yeah, I always like to think like, this is gonna be a nice to have thing. Like I'm not banking on this. I think for 4G, I was so excited about it. I just waited on every dime and breath waiting for it, but unfortunately, you just kind of have to be like, "Alright I'm gonna watch this stuff." But when it comes to watching things, is there any like, resources that you use to kind of stay up on top of mobile stuff? I figured I'd share some of my favorite things and favorite places. Blogs and YouTube channels and things like that so people, if they are interested in this, they can kind of stay their ear to the ground a little bit more as well.

**Brandt Krueger:** Yeah I mean, so I'm a huge podcast listener. And so I listen to a large quantity of podcasts every week. And the main network of podcasts that I listen to is This Week in Tech, TWIT. It's the TWIT network, and they've got individual podcasts for Android, iOS, Windows and

Mac. Those are all individual podcasts that you're able to. And this is kind of the convergence of all of those, right? So being able to kind of keep track of things. So I follow Silicon Valley in general, is a great way to see what's coming down the pipe for event world, since we tend to lag behind a little bit.

**Will Curran:** Yeah, totally. I was also gonna recommend, I mean we mentioned it at the beginning with Mobile World Congress, but obviously, check out the news that comes out of Mobile World Congress every single year, or around this time. Because this is the time when all the big announcements kind of get made and everything like that. So just Google 'Mobile World Congress news,' and boom, you'll find a million different setups. A big fan that I am of mobile news as well, and just general tech news is The Verge, The Verge for stuff. Though they're kind of in hot water right now from a bunch of YouTube scandals, so we'll see if they survive that. But I highly recommend them as well. If you're an Android user, there's a site called Android Authority that's really, really good that I like a lot as well. I'm just pulling up kind of my list of-

**Brandt Krueger:** While you're doing that, I'll just throw in a plug for, I've actually been really enjoying the Google News app. Just the straight up Google News app. It's trying to do- It's trying to give a balance of different types of news that it thinks you might like, combined with straight up headlines. So it's not fully- it's not one of those search bubble things, where it's going to try, and just give you what you want. So it's a combo platter of, here are the top headlines from across multiple sources. Here are things that we think you'll be interested in, and then you can also plug in your own interests. So, I know like Nick Borelli's always talking about using Google Alerts to keep track of stuff. This is kind of maybe a softer way of doing that, where you kind of plug in, "Hey, I'm interested in events."

**Brandt Krueger:** But it does have a little bit of that Google juice of like, figuring out what you like. So it's figured out that I'm into whiskey these days, and it keeps bringing me up articles in my newsfeed about, here's the top 50 whiskeys under \$50.00, those kinds of things. So I've been really enjoying it, and it's got a nice dark mode too, so it's nice to kind of get up early in the morning and read the news without burning your eyeballs out. Alright, I stalled. You got your list?

**Will Curran:** I think that's probably about covering it. But now that you mention it, an app I just want to mention, my news reader app of choice. Obviously that's good for like, catching a little bit of everything, which I think is important. I think that sometimes, especially in tech, you can't just focus on just a single source, because sometimes these news stories of these new leaks and new things being worked on and new opinions on it, if this is actually good tech or not get broken in different sources. But for me, Feedly, F-E-E-D-L-Y is my RSS reader of choice. I like it combined with Pocket. But I admit, over the last month or so, or since I've been abroad, I haven't been staying on top of it as much as I used to, and I think I might need a little bit of a cleanse of sources. Because I feel like especially right now in Mobile World Congress, I see five of the same story about the foldable Huawei phone. Oh, 100 stories about the foldable Galaxy

phone. I'm like cool, but then I miss out on these little one off stories about this cool unique backpack that I want. That's me getting bag nerdy.

**Will Curran:** But yeah, I think just find your sources, but don't be afraid to like watch the tech stuff, or just listen to our podcast. And we'll probably just catch you up on it eventually anyways.

**Brandt Krueger:** So, we want to know what you folks think. Tell us about the- tell us about are you gonna rush out and get this foldable phone for \$1900? Are you gonna wait and check out the Huawei version and take a chance that they're gonna shut down our infrastructure? I'm teasing about that, I have no opinions on it one way or the other, and I'm not trying to get political. So be seriously, what are you excited about there in event world? What you think you could accomplish with a tenfold increase in speed? What do you think, are we gonna see Will's utopia, or my utopia of venues actually providing 5G service to their venue? Or is it gonna be dying kicking and screaming the whole way along the way? Do you think we're gonna be able to get to the point where we've got 5G everywhere? Or are we going to have to bring in our own hotspots?

**Brandt Krueger:** Let us know what you think, and tell us in the comments, send us an email, or use the #eventtechpodcast on whatever apps and services you use.

**Will Curran:** Yeah, absolutely. And if you haven't already too, head to [eventtechpodcast.com](http://eventtechpodcast.com), sign up for the email so you can get the exclusive content, exclusive invites. And we'd also love for, if you can, while we are in the process of a couple episodes in now, getting this rebooted up and good-to-go, we'd love your reviews as well. So whether it's iTunes, Pocket Casts, Stitcher, on Facebook, wherever it may be, help leave a review so then that way, other people know that this is an awesome podcast to tune into. At least we think it's awesome. If you're at the end of an episode, we hope it was pretty awesome. Either that or you just- our voices help you fall asleep.

**Brandt Krueger:** Yeah, if you love it, tell us why you love it, leave a review. If there's something we could be doing better, shoot us an email and let us know what that is, so we can actually do something about it and know that there's something maybe we can do better about the show.

**Will Curran:** Exactly. Well, I think that does it for this week's Event Tech Podcast, thank you guys all for tuning in, and we'll see you next week on The Event Tech podcast.

**Outro:** Thanks again for listening to the Event Tech Podcast. Be sure to rate and review us on your favorite podcasting app. Also, be sure to head to [eventtechpodcast.com](http://eventtechpodcast.com) and leave us a comment about this week's episode. We'll see you next week on the Event Tech podcast.