Profitero ⟋⟍ PODCAST

Episode (41): The Democratization of Voice

Eric Bisceglia
Voysis

Keith Anderson
Senior Vice President of Strategy and Insights - Profitero

Keith Anderson: Hello. Welcome to another episode of the Profitero Podcast. I'm Keith Anderson, SVP of Strategy, Profitero, and I'm really excited about this episode. Over the last 10 or 15 years that I've been observing and analyzing retail and technology, there've been at least a dozen technologies described as potential game changers, but I think voice has clearly emerged as a truly game-changing technology. Much of the industry is adapting, I think in my view, a little too late to a mobile first world, but you now increasingly hear retailers, and especially brands, talk about mobile first, voice second.

I'm really excited to have Eric Bisceglia of a company called Voysis as my guest. Voysis is a technology company that's built a voice AI platform that retailers, brands, and other companies can use. We get into a lot of the important topics about what has driven voice adoption and where we are on the maturity curve, some of the decisions that retailers and brands are grappling with, and some insight from a study that Voysis recently completed that should be released soon. It's a great discussion. I think you'll enjoy it, and I'm excited to welcome Eric Bisceglia.

Well, today, I'm really excited to welcome Eric Bisceglia of Voysis. Eric, thanks for joining us here in our office.

Eric Bisceglia: Keith, great to be here. Thank you.

Keith Anderson: If you don't mind, Eric, maybe introduce yourself and your role and tell folks what Voysis does.

Eric Bisceglia: Absolutely. I'm a VP, go to market at Voysis. Voysis is a voice app platform and what we do is we make it very simple for retailers and brands to add their own brand specific voice AI experience to their websites, their mobile apps. We're a technology company split between two offices based in Boston and Dublin. We've actually just opened a new office, another program in Scotland. So, that's pretty much the down low on us.

Keith Anderson: Gotcha. Yeah, it's funny, you got an office in Boston and Dublin, and we met because we share an investor. We also have offices in Boston and Dublin.

Eric Bisceglia: Yes. It's a good combination.

Keith Anderson: So, as I sort of look at frame works, like the Gartner Hype Cycle, I've been studying retail and technology for a long time. I'd say it was the last five years. You could point to a dozen technologies that someone at some point said were gonna be disruptives. Beacons, blockchain, AR, VR, and I think voice caught a lot of people by surprise. [crosstalk 00:03:01] So, if you've got more data than I do, but if you look up the last three or five years, it's not the only, really, breakout technology that's been reasonably widely adopted by consumers.

Eric Bisceglia: Absolutely. I think we've seen, particularly this year, in 2017, if you read the different publications coming out of Holiday Season in particular, it's been dubbed the year of voice. It's been dubbed the break out year for voice. You look up some of the stats coming out of, actually back to January, the only smart speaker on the market at the time was still the Echo from Amazon. They record, I think it was, 9 or 10 X to increase year over year in terms of holiday sales on that device.

Keith Anderson: Always relative. Never absolute. I can't tell you exactly how many [inaudible 00:03:51]

Eric Bisceglia: Well, exactly.

Keith Anderson: Not gonna lay the whole sub values on that one.

Eric Bisceglia: It's so true. And since we've seen Google out on the market with Google Home. We've seen Apple introduce the Home Pod, obviously to be available shortly and Microsoft doing a lot of good work with Cortana, etc. So if you think about where we've come from even since January of this year, it's been a big year for voice. I think a lot of it started a few years back with some of the original investments that Amazon made in this space, too.

Keith Anderson: And it antecdata, not real data, but I often tell people I was very cynical especially after the flop of the Fire phone, when Amazon was launching the Echo. I sort of said to myself, "Boy, this is just another effort to get people to buy more stuff." But you don't appreciate how much friction there is in pulling your phone out of your pocket and unlocking it and finding the app and doing all that.

Honestly, that's not necessarily too much friction. Even within an app there's a lot that you can do to reduce it.

Eric Bisceglia: That's true.

Keith Anderson: Once people try some of these voice AI agents, the experience is uneven for sure and I think it's still really early days. I think just the experience of trying to answer a question or order something in this new paradigm where it actually works a reasonable percentage of the time. I sort of tried voice with Siri six years ago, and it was so uneven that I gave up. But, these last couple of years, and especially this year as you say, you can do a lot more and it's evolving every day.

Eric Bisceglia: No, I agree. We hear ... I hear it every day in so many first time conversations with folks. A lot of us ... I hate to say this I'm a happy user of Apple technology now and for a long time. But a lot of us our voice AI experiences were spoiled by Siri because we did all have that ... It was definitely a great case of overpromise and under deliver.

Keith Anderson: Which I was so surprised by because Apple has historically has been best in market not first in market.

Eric Bisceglia: Exactly.

Keith Anderson: Not necessarily from a technical point of view, but from a customer experience point of view. And Siri is one of the most glaring examples. They were the first one to market with ultimately the worst experience.

Eric Bisceglia: Yes, it's fascinating and I think, particularly if you look at where they are today, they're generally behind, right? And I think it's clear they're going to invest to try to catch up. It's certainly a new arms race and then, to your point, they were first to market but I think the head runners in the smart speakers space right now are definitely Google and Amazon. It's been an interesting evolution.

Keith Anderson: So, on that point, I think a lot of people, and I used to, think of voice commerce and voice search almost exclusively through that purpose billed device. But, despite all these stats that you see now about adoption of those stand alone smart speakers and so on, there's already installed base of, what is it, 80% of the US population has a smart phone.

Eric Bisceglia: It's about that.

Keith Anderson: If not higher. Basically, everybody has a desktop or laptop. Voice has a role to play on those much more widely adopted platforms. How do you think about the way that voice is starting to permeate all devices and all platforms in ways that transcend just these dedicated smart speakers?

Eric Bisceglia: It's an interesting point because you brought up Siri. I think really the first example where consumers, at least in the modern age, interacted with voice technology ... I mean, it really goes all the way back to the '50s when IBM and Bell Labs actually built some of the first prototypes of these voice computing engines that could understand digits and a few words.

Keith Anderson: And Dick Tracy with his watch.

Eric Bisceglia: Exactly. Yeah, right. And it's definitely been an evolution since. But, I think in the last few years we've seen the technology from Compute Par and obviously a lot of the Compute Par intake capabilities and technologies that [inaudible 00:08:25] really driven what's possible today to the forefront in a few years. But, that started on a mobile phone. It's no surprise. Phones were designed for talking. They were designed for voice. I think voice, whether it's a conversation with another live human being or a machine that's able to interact, they're able to interact with, it has a natural place in the phone, right? The smart speaker obviously is seen as a voice first or even people have coined the term zero UI, right? Meaning, there is not UI, which I think is an interesting concept, but at the end of the day, voice is another mode of interaction. We live in a very multi-modal world where we're using smart phones to point at televisions. We're in cars that have a very immersive technology experience nowadays. We've got these speakers.

We believe that voice has a role to play in all the technology that we interact with just like gesture based interaction or text based interaction. It's not always the right mode to use for every interaction. So, I think that's what we've seen to a point with the smart speakers. There are limitations because the use cases today and the one Alexa, and I'll just use that as an example, for the most part it's reorder. It's not a great platform. Voice only is not a great platform to use for browse, peruse and discover products. It's better from others. Whereas, if you have the screen and it's more of a considered purchase, it's probably a better way to search for those products but voice has a role to play in that mobile experience or that computer based experience.

That's why that underlying technology stack needs to be there and available to companies as they build up that digital experience so they can add voice to those types of interactions.

Keith Anderson: It was a big evolution and in my thinking about voice when I went from a couple of years of experience with smart speakers, the Echo to ... As Amazon launched the Echo Look and the Echo Show and basically voice plus screen. All of a sudden to your point, I realized now it's not going to return one or two items in response to a query. It's going to show me the list just like when I'm on a laptop.

Eric Bisceglia: Exactly.

Keith Anderson: Then I thought, well wait a second. I don't need a dedicated speaker with a screen. I have those things. My phone has a screen and it has a mic. My laptop has a great screen and it has a mic. All of a sudden I realized, while there's probably some sort of multi-modal points of interaction where the input might be voice but the output definitely does not need to be voice and it definitely suggests to me that we are going to see a lot of interesting innovation and adoption on these existing platforms of mobile and desktop, integrate voice in ways that I think a lot of people still aren't thinking about.

Eric Bisceglia: Yes. I agree. We recently ran a survey of just over 100 retailers with retail touch points and found some really interesting things focused on mobile and voice and the intersection of the two. Some of the interesting findings about mobile were that the majority of people said about 20% of their digital revenues came through mobile. But all the data that we're seeing points to that number increasing, I think like 40% over the next year. The interesting part of conversion there is retail traffic is actually higher. So, it's about 60% of traffic comes via mobile. Depending on the report, I've seen some less than 20% of conversion. So, there's a disparity there and I think we're seeing more and more retails focusing energy on mobile. So, now the question is mobile has been around for quite a while, 10 year anniversary of iPhone, and I think a lot of people are just catching up as it relates to responsive web experiences and whatnot. So, there's a big focus on what are the technologies that can help make the mobile experience better.

Another thing we learned from the survey was that, and this was fascinating, by the end of this year, 50% of the respondents said they will have mobile voice shopping on their roadmap. So, you think about a roadmap being looking out 12 months at the technologies they're going to deliver to their users. By the end of 2016, that number is going to jump to over 60%, right? I think it's interesting to see that evolution given that if you actually go back to the beginning of this year, the percentage of people who were looking to invest in voice on mobile was sub 1%. So, we went from essentially zero to 50 in 12 months. That actually mirrors the investment that they said they'd be ... the amount of time they said they'd be investing in these smart speaker integrations over the next 12 months as well. I think voice has definitely taken ... In most industries, but certainly if you look at retail, if you look at entertainment, as taken from afar, and they're all taking notice and looking to invest. I think the next 12 months we're definitely going to see those experiences evolve quite a bit.

Keith Anderson: So, if you think about the way retailers or brands are building that roadmap, I imagine a lot of them are taking a build by partner approach. I think we've all seen many, many, retailers or brands, including some retailers that Amazon might consider competitors, have launched Alexa Skills and they're integrating with Google phone and that sort of thing. How do you think about the decision tree and some of the trade offs between those different pathways. Are any of them mutually exclusive? Can you experiment with one while maybe doing

something differently as bigger benefits and what are some of the trade offs between those different paths?

Eric Bisceglia: It's an interesting question. I think if you look at what Apple, Google, Amazon, I could keep going, Microsoft have done ... I like to say often times, we're lucking because they're training consumers for us. The work they've been doing has definitely been warming up the general population toward the idea of using voice. Earlier in the year, I had people, not to go on a tangent but, saying why would I want ... I'm not going to talk to my phone when I'm walking down the street. Or, I'm not going to ask my app to turn it up or search for something. How is that any different than the private conversation you have in the open with your mom on the subway, right?

Keith Anderson: Honestly, I see people ... I think once the air pods launched, it blows my mind ... Walkman has been around for 30 years or whatever ... I see more people with both traditional headphones but increasing the air pods on basically anytime they're in public.

Eric Bisceglia: It's so true.

Keith Anderson: And it bothers me because nobody looks at or interacts with other people anymore. And I get it. I live in a big city. At the same time, I think people don't yet appreciate that smart headphones that are in your ears and have mics are going to make some of that friction that I mentioned earlier about, well if you've got your phone you've got to pull it out, unlock it, all that stuff. The combination of face recognition to unlock a phone and ear buds are going to eliminate that stuff too. So, I think, to your point, don't just assume just because people aren't today speaking to their phone that they won't be in three years or three months.

Eric Bisceglia: Exactly. It's changing overnight. That's sort of a tangent from your question, but to get back to that, I think, particularly for retailers, we've definitely ... I think a lot of people [inaudible 00:16:55] and concerned about the moves that Amazon is making obviously. They're clearly a power in the market and they're very quickly jumping into different of e-commerce and retail. They're evolving their technology stack overnight and it's hard to compete with. There's definitely concern there and I think that's a big drive for why we've seen a lot of, particularly the larger retailers like Walmart and Target, come out with news about their partnership with Google. I think, listen, that's all great, but at the end of the day, we were talking about the numbers behind these speakers, the estimates of, none of these are officially from Amazon or Google, but maybe there's $20 million in smart speakers on the market right now. There's over 300 million people in the US so while the data points to something like, by the end of 2020, 50% having a smart speaker, most consumers interact with brands and retailers through a different channel.

So, does it make sense to integrate with Google? Sure. Right? It's a great way to experiment with the technology, to your point. But, at the end of the day, we

believe that voice is bigger than that. Voice is that next mode of interaction that fits into your mobile website experience. It fits into your mobile app experience. You might have your own piece of hardware that's in store or something, an Alexa of your own, that you want people to be using at home. So, give everyone the means and the technology to build those experiences in an omni channel way so that interaction is consistent regardless of how you're interacting.

I think retailers are smart and, based on the dynamics of their business and the competitive field that they're faced with, they're making decisions to invest in voice in different ways. But, at the end of the day, I think just like gesture based interaction became so common, we've all seen little kids swiping at the TV and trying to figure out why it's not a touch screen. So, I think voice is the same. It's going to be ubiquitous and omnipresent and I think people understand that and are starting to see it that way. We think it's just another mode of interaction that belongs everywhere.

Keith Anderson: Yeah. I think that's a great starting point for how to think about it. There is a specific execution or implementation of it that I think a lot of people, myself included, got it anchored in and they see that as the whole story. But, I love the example of kids wondering why every screen or surface isn't touch screen. I agree it seemed pretty good that before long there will be an expectation that basically most technology can be interacted with through voice. Then I think there's all these adjacent considerations about what do you give up and what do you get when you partner or participate in some of these platforms. We were having very similar discussions years and years ago as it related to do you sell on an open market place or a comparison shopping engine. Do you build your last mile logistics network or do you partner with somebody like Google Shopping or Instacart. In every one of those cases, I think there's always a scenario where it makes sense for somebody. But you have to understand what their economic model is. Are their incentives aligned a lot, a little, or not at all with yours?

Then, secondly, things like who owns the customer relationship and who owns the data and who controls their experience. I think those are all really important questions because part of how some of these platform businesses that got where they got, got there was basically by sneaking in with something early on that made it easy and you don't have to go build it yourself. Just jump on our bus. Then you wake up five years later, and they've extracted 90% of the value or more in that capability area.

Eric Bisceglia: Yeah. It's a Trojan horse of sorts to get in. I agree. I think voice, the dynamic there, is still sort of settling out. I was meeting with a pretty large e-commerce company yesterday. We were chatting about the dynamics of integrating with the big platform companies. I think the challenge that they face is that you don't have access to the data. You can't really control the customer experience. It's very hard to tune the system in a way to ensure that accuracy gets where you need it to get with these voice systems. To your point, it's a huge determining factor on the customer experiences as well. If you look at the data, a great voice

experience needs to be 98-90% accurate. A very small percentage of the time is it not understanding what you say, identifying the intent that you have when you're interacting with the system and providing a meaningful response.

Keith Anderson: And providing it promptly.

Eric Bisceglia: Providing it promptly. Absolutely. A lot of times what people are seeing when they're using these other technologies, they are seeing 70-75% accuracy. Naturally, they're not happy with that and neither are consumers.

Keith Anderson: Is that specifically for things like skills?

Eric Bisceglia: A lot of it's for skills. Yeah, specifically if you look at Alexa and you look at Google Home, the types of things that you can do ... and they've tried to make it easy for people to build these apps if you will. But, it's just like the reason why we all started building our own mobile apps. Everyone's building their own underlying technology and different services, web services, because we all understand our users better than anyone else. So, that experience can be finely tuned. Voice is no different. What we see is that Amazon and Google are building voice that are designed to do things that they designed them for really well. That's to be really the first point of interaction. That's to allow them to guide the consumer to the best sort of thing for you and they're trying to discern intermediate all the service providers to being sort of a data layer. That's sort of the end game for them, where all you do is talk to this thing and everyone else ... you know, if you're looking for a ride, well I'm going to give you the best ride service based on cost ... exactly.

Companies, brands, retailers, they're concerned about that and they still want to own that experience so that's why I think, personally, if you look at your own digital experience today, the technology is out there to integrate voice interaction and to those experiences, it can be finely tuned and highly tuned. It can be brand specific. I think there's going to be shift toward people looking at it that way very soon.

Keith Anderson: Are there examples you can share of retailers or brands that have done something really excellent? Candidly, it doesn't even have to be a retail or brand. I think some of my best experiences with voice have not been in retail, but what do you think as some of the very best executions?

Eric Bisceglia: It's a great question. I think it's funny if you look at the adoption of the different skills or actions on the different smart speakers. You tend to see some patterns where a lot of it's ... the clear winners are music. So, companies like Spotify obviously, Amazon's own music service, Google Music, Apple soon on the Home Pod, but I think the music experiences have been a clear natural winner because it's sort of command and response. When you ask it to play Billy Joel it just returns and plays Billy Joel. I think for a lot of reason's, actually, because I feel obligated to tie it back to retail, music is one of those long tail sort of categories

where there's tens of thousands of artists and songs and albums. So, even compared to search, the dynamic of ... I know what I want to hear and I ask in plain language with my voice and that type things, no tapping, and to get the response and have it play instantly, I think really is a great example of how magical it can be to use voice to interact.

Keith Anderson: It's a great proxy for retail. I completely agree. I think, for various reasons, because music is obviously an audible experience, there's a lot of good stuff that came out this year.

Eric Bisceglia: On retail, candidly, it's early. We haven't seen a lot come to the forefront. I think we entered the market this year with a new offering that allows retailers and brands to spin up their own voice that's customer to them, that's brand specific. A lot of the work that we're doing with retailers and brands thus far, which will see the light of day soon of course, while it's behind the scenes, it is exciting. I think what we're seeing in these experiences is particularly on mobile, a lot of the user experience hurdles that we've been facing for years are actually able to be overcome by voice. Things like have you ever done a search, Keith, where you've done an initial keyword search for something and then you go to try to filter and the side map swings up and there's 900 check boxes and you're scrolling down. You don't know where to hit okay and then it doesn't ... That experience, that mode of interaction, was designed for computer based web browsing. We've never really found a way to transition it well to mobile.

Well, the cool thing about voice is because it allows you to use natural language. You can bundle all of that into one command. You can say, "I'm looking for a red pair of shoes in a size 10 that's available to ship today to Boston." And the system can do all that for you in one fell swoop and circumvent that painful, visually, experience. Again, these are the things that consumers aren't really experiencing yet but they will soon. I think those are the types of experiences that are allowing us to get around some of these painful, digital, UI issues that designers and product people have been grappling with for a long time. I think there's a lot of interesting stuff to come in retail. I think we've seen some examples of that. To be fair, Amazon's done some really interesting stuff like the reordering capabilities that you can do if it's a product that you bought before. It's really simple to reorder using voice.

Keith Anderson: Baby wipes

Eric Bisceglia: Yeah, it's so true though. With young kids, it's like the things you need to replenish every other day. So I think that's been a big winner in retail thus far. I think search and discovery is going to be a huge one moving forward. Again, that's one that I think lends itself well to mobile because it's a visual experience too.

Keith Anderson: Yeah. Are there any resources or thinkers or anybody that you think is advancing the conversation around voice?

Eric Bisceglia:	Yeah. I think obviously I have to plug our CEO Peter, because he's definitely been out there quite a bit. He's been on the road recently and speaking at a lot of events. I think-
Keith Anderson:	What's Peter's last name?
Eric Bisceglia:	Peter Cahill. So Peter is the founder and CEO of Voysis. Peter has spent his entire career around speech technology. I think he's definitely go a really interesting point of view on that democratization of voice and building this independent platform that can be plugged in anywhere. Peter is doing some great stuff out there obviously.
	There is Brian Romelli actually who's been pretty active on Twitter. A lot of people follow Brian. We've been interacting with Brian quite a bit recently. The Voysis team has. I think he's doing a lot to push this voice first movement and I think helped get broader attention over the last year. But, I think it's still early. There aren't, at least in the retail world ... We're about to see these people at specific retailer and brands emerge as the digital champions of voice. I think they're still quiet. But, I can just tell you from our direct experience, there are plenty of people who really see the big vision here and the huge opportunity in retail and e-commerce. I think it's just catching up with the market.
Keith Anderson:	Yeah. And that's the thing. I imagine for a lot of people listening, my hope is this will change their thinking and open their minds. If they're like me, they're going to want to know ... okay, now I'm inspired and I want to go learn more. So, I think it's nice that we can point people to a couple reasons.
Eric Bisceglia:	No. It's great.
Keith Anderson:	And you mentioned that study. So, if people want to get the results of the report that you did, how do they get that report?
Eric Bisceglia:	Yeah. So, it's on our website at voysis.com. If you want to check out our Twitter that a super, super way to find the latest and greatest stuff too. So, we're just @voysis. So, really simple to find the latest and greatest stuff there.
Keith Anderson:	If people want to reach you directly?
Eric Bisceglia:	Go to our website. We've got web chat and all the modern day ways of interacting with ...