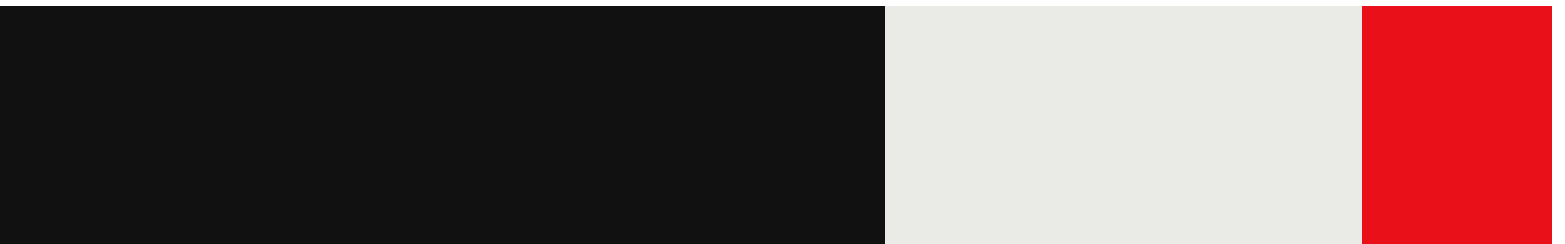


The Daily: The Great BtN Take Off—2024 tech trends, AI smartphones, immersive media, and GenAI's misinformation

Audio



On today's podcast episode, our contestants compete in The Great Behind the Numbers Take Off, 2024 tech trends edition, where they will try and cook up the most interesting predictions for the coming year. They'll discuss how on-device AI features will boost flagging PC and smartphone sales, what happens when GenAI makes content less trustworthy, and how immersive media will take a qualitative leap. Tune in to the discussion with our analysts Jacob Bourne, Gajo Sevilla, and Yory Wurmser.

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Episode Transcript:

Yory Wurmser:

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Marcus Johnson:

Hey, gang. It's Monday, January 8th. Yory, Gadj, Jacob, and listeners, welcome to the Behind the Numbers Daily, an eMarketer podcast. I'm Marcus. Today I'm joined by three people. Let's meet them. We start with our Principal Analyst who heads up are technology, advertising, and media desk based in New Jersey. It's Yory Wurmser.

Yory Wurmser:

Hey, Marcus.

Marcus Johnson:

Hey there, fella. We're also joined by one of our Senior Analysts on our connectivity and tech briefing based in New York City. It's Gadj Sevilla.

Gadj Sevilla:

Hi, Marcus. Happy to be here.

Marcus Johnson:

Hello, sir. And finally we have one of our Analysts on that same connectivity and tech briefing based in California. It's Jacob Bourne.

Jacob Bourne:

Hey, Marcus. Thanks for having me.

Marcus Johnson:

Hey, chap. So, gents, today's fact... I brought three. I don't know why. This segment's already long, but let's see if we can get through them. Some unknown facts about the Statue of Liberty, originally called Liberty Enlightening the World. That's not one of them, but it's cool.

Number one: She was once a lighthouse. According to the US Coast Guard, about a month after the statue's 1886 dedication, it became a working lighthouse for 16 years with its torch visible from 24 miles away. Number two: The seven rays in the crown, (basically the spikes),

represent the Earth's seven seas. And finally: Creator and sculptor Frédéric Auguste Bartholdi used his mother as the model. Do you guys know any of that? You're probably like, "Yeah, Marcus. We know."

Jacob Bourne:

But the lighthouse makes a lot of sense.

Marcus Johnson:

It makes too much sense.

Jacob Bourne:

It started out as something practical.

Marcus Johnson:

Okay. Have we been?

Yory Wurmser:

I was in the Statue of Liberty before it was renovated 35 years ago. So, a long time ago.

Marcus Johnson:

She's smaller than I was expecting. Just saying. It's cool to look at, but you have to squint for most of the time. Anyway, today's real topic... The Great Behind the Numbers Takeoff, (bakeoff play); Tech Trends 2024.

In this episode, first in the lead we'll cover tech trends for 2024, bakeoff-style. No any other news today, so let's get on with it. This is the Great Behind the Numbers Takeoff; Tech Trends 2024. In today's episode, our takers, (or bakers), will be cooking up some technology-related expectations for the coming new year that we're currently in.

Three rounds; We have the signature take, we have round two, which is "how it will technically play out" challenge, and then round three is the show-stopping arguments. So, what tech trends are our panel predicting in 2024 in the realm of technology? Let's meet the contestants' predictions. We start with Gadjo.

Gadjo Sevilla:

Yeah. So, for 2024, I think on-device generative AI features in PCs and smartphones, and even wearables, are going to be a huge, highly-marketed selling point for adoption of these devices.

Marcus Johnson:

Okay. Jacob?

Jacob Bourne:

My trend kind of builds on Gadjo's. In addition to that on-device AI which you're going to have is a proliferation of AI-generated content on the internet. So, we're going to have a big regenerative AI year, but there's something else happening in 2024 as well, and that's that it's going to be a big election year. About two billion people will vote in 50 countries, and what that means is that there's going to be a high risk of misinformation due to generative AI and it's going to really test the trust of the system.

Marcus Johnson:

Yory.

Yory Wurmser:

I'm also talking about generative AI a little bit, but much more tangentially, and my idea is to immersive media. So, augmented reality, mixed reality, and virtual reality will take a qualitative leap this year.

Marcus Johnson:

Okay. All right, gents, let's move to round one. It's Signature Take. Our chefs will have one minute to explain the premise of their trends. Let's go back to Gadjo. One minute on the clock for you, sir. Give us a summary of what your trend is all about.

Gadjo Sevilla:

Okay. So, since the pandemic, a number of areas in tech, (namely PCs and smartphones), have been sort of lagging in sales. There haven't been too many features that have been deemed compelling enough. But I think on-device AI computation thanks to the neural chips that are going to be available this year is going to help boost sales and adoption, and these will be for

premium devices and hoping that the AI-enabled PCs, devices, wearables, and smartphones gain ground this year.

Marcus Johnson:

Okay. Is that going to be phones and PCs being sold as, "Hey, get this device, and it's going to come with an AI chip and everything is going to be faster"? Or does it come with a specific use case attached to that AI chip, do you think?

Gadjo Sevilla:

I think the biggest use case would be on-device security. So, you don't need to tap into the cloud. That's great for enterprise, it's great for privacy, and a lot of these companies are going to be baking in a number of...

Marcus Johnson:

Baking in. I see what you've done.

Gadjo Sevilla:

Yeah. Well, you've got to put it in there. So...

Marcus Johnson:

Points for that.

Gadjo Sevilla:

They're going to be baking in functionality that uses this technology.

Marcus Johnson:

Okay. Jacob, your turn, sir.

Jacob Bourne:

Yeah. As we know, 2023 was a huge year for generative AI. So, I think 2024, it's likely shaping up to be a similar big year for the technology. And of course one of the things about it is that it's becoming more and more advanced, which means it's harder to distinguish between human-generated content and AI-generated content, harder to distinguish between accurate real content and things that are made up, fictitious or malicious.

So, it's almost a given that bad actors are going to exploit the technology to spread misinformation. And of course with the timing of so many elections globally, it's almost inevitable really that this is going to be the outcome. So, "What's going to be done about it?" is the big question, and I think the answer to that is just there will be steps taken, but it probably will not be enough.

Marcus Johnson:

Yeah, yeah. You mentioned the elections happening. Around a billion voters heading to the polls in 2024-

Jacob Bourne:

Two billion, two billion.

Marcus Johnson:

Oh, it's closer to two billion? Wow.

Jacob Bourne:

It's two billion. Yes.

Marcus Johnson:

Okay. Oh, yeah, because you've got-

Jacob Bourne:

In 50 countries, including the US of course.

Marcus Johnson:

In 50, okay. I guess you throw India in there and it gets to 1.4 immediately. Yeah, no, you're right. Then European Union, there's some in there, the UK, Indonesia, Russia, the US as well. So, yeah, the significance, the gravity of it magnified.

Jacob Bourne:

Yeah, and apparently it's the biggest election year I think in decades.

Marcus Johnson:

In terms of total people voting, or voting turnout in individual...

Jacob Bourne:

Total people voting, yeah, and in the countries. So, the timing that you have this technology that can really disrupt the election potentially with so many elections, it's going to be an interesting and pivotal year for sure.

Marcus Johnson:

Yeah. All right, very nice. Yory, your statement for your Signature Take.

Yory Wurmser:

My trend is immersive media. It's going to take a qualitative leap. The idea here is that there was a lot of hype around the metaverse. It fizzled. The hype was overstated. Part of that I think had to do with the state of VR headsets and AR. But even so, about 90 million people use AR in the US, 70 million just on social media on their smartphones, and an additional 70 million use VR, virtual reality. So, it's already pretty heavily used, but a bunch of devices coming out this year and some technologies around AI I think are going to lead to some significant improvements in AR and VR, and will lead to a lot more interesting use cases.

Marcus Johnson:

And we'll get into it a bit more in a second, but when you say 70 million using VR, we're talking about VR that could be like 360, right? Headsets, the numbers a lot lower.

Yory Wurmser:

Yeah. I don't have the number directly in front of me, but I think it's about half use it on dedicated headsets and the other half are 360s.

Marcus Johnson:

You're spot-on. Yeah, I was checking the numbers earlier. It's about 11% of the American population. So, yeah, about 35, 36 million classified as VR headset users in 2024. So, there's that distinction there. But as you mentioned, this is immersive media, so it encompasses a lot of different technologies. But you're saying that AR will likely still lead the charge with some VR driving it as well for 2024?

Yory Wurmser:

Yeah, absolutely. AR, because it's on our phones, it just has mass adoption already.

Marcus Johnson:

Yep, yep. Very nice, gents. Some great Signature Takes for round one. Let's move to round two, the, "How will it technically play out?" challenge, where our chefs will explain in more detail how they expect the trend to manifest. So, let's go back to Gadjo. He's talking about on-device AI features boosting flagging PC and smartphone sales in 2024 by making premium devices more desirable. So, Gadjo, talk to us a bit about how you see this all playing out over the year.

Gadjo Sevilla:

Early in the year we're going to see a lot of product launches. Samsung is launching their Galaxy S24 on January 17, and that's supposedly going to have a lot of on-device AI capability. At CES I'm sure we'll see HP, Lenovo, Dell, everybody sort of lean into this, especially for the high-end of the product lines.

So, for regular consumers it may not be that compelling considering you can get your AI fix on a web browser. But having a secure personal device that can quickly run very specific types of generative AI applications, I think that would be a big selling point, at least to a certain segment of the market.

Yory Wurmser:

The context for that is just that smartphone sales globally have been fairly flat the last few years. So, they're looking for this new innovation to really boost the market. And most of the growth in recent years has been coming from these premium devices, and this is I think a really killer premium feature if they can do it.

Gadjo Sevilla:

If they can do it, yeah.

Marcus Johnson:

So, is this, I'm going to say "true AI advancement"? Because auto-complete when you're typing out an email is using some form of artificial intelligence, right? So, I'm wondering whether, if they're saying "AI", is this more of a marketing play? Like with 5G, everyone was talking about 5G before true 5G was really here, and it's kind of 4.5, 5G-ish. Is this actually a

bit of a quantum leap, so to speak, in terms of these AI chips being placed in phones, or more of a kind of marketing tactic?

Gadjo Sevilla:

I think you can expect a lot of marketing to push "AI", but for certain applications like on-device translation, which can happen without the cloud, a lot of these micro-transaction type things that can be handled by machine learning, these are very powerful mobile devices. I think they can hack that.

Jacob Bourne:

And I think this is the reason, too, why a big year for generated AI also means a big year for chips, especially these on-device AI chips that need to function with such a high efficiency to allow for advanced AI to be possible on a consumer device.

Marcus Johnson:

Right. All right, Jacob, let's come to you. You're talking about how generative AI will make content less trustworthy and what that means. How does this play out in 2024?

Jacob Bourne:

Yeah, and I want to be clear here that the reason why this is an issue is because of how good generative AI is, not because of how bad it is. It functions really well. You can't tell the difference often, (depending), between an image that's AI-generated and something that's human-generated, and same thing with especially text, and then increasingly audio and video. And that's why we like it. That's why it results in productivity gains.

If it wasn't that way, then you wouldn't have those benefits. And it's also why we can expect politicians themselves are going to be using generative AI in their campaigns, and everything from speech-writing, to creating campaign materials, to connecting with voters. So, there's going to be positives there, right?

But it's its very strength that's also its biggest weakness, in that, well, then how would you distinguish? People obviously are going to want to know if they're consuming content that's human-generated or AI-generated, and whether or not the content is true and accurate or intentional misinformation. So, this is going to be a hot-button issue for much of the year, and

right now there's not a lot of momentum really to address it, but I think that we're going to see that increase.

Marcus Johnson:

Will we see that? Yeah. Will we see governments start to mandate some kind of AI-generated watermarks in 2024?

Jacob Bourne:

I think they're going to have to do something to address this problem, and tech companies are working on it, too. They're embedding data within the file of whatever the asset is that labels it as AI. There's also tools to detect whether something's AI-generated after the fact. And then it also is just fact-checking whether or not something actually did happen that's depicted in a photo.

So, there's going to be three things. We're going to see some regulation in some countries around this mandating it. Tech companies just for reputational issues are going to have to make these tools and measures available. And then I think also in 2023 we saw a lot of tech industry layoffs, and a lot of that was around content moderation roles, including at social media companies. I think we're going to see some rehiring happen due to the upcoming elections on that front because the misinformation problem, the content moderation problem is going to be even more significant this year due to generative AI and due to the elections, and I think there's going to need to be some human labor involved.

Marcus Johnson:

Yeah. All right, very nice. Very nice. Yory, we'll come to you to close out round two. Immersive media will take a qualitative leap. Talk to us about how you see this going in 2024.

Yory Wurmser:

Yeah, there are three big factors that I think will drive this. The first is just Vision Pro, Apple's mixed reality headset that's coming out in February, just in a few weeks. It's super expensive, \$3,500. It's not going to be a major consumer hit, but it is going to be a pathbreaking device. It's going to do things that no other device has been able to do, and it's going to attract developers to the device, and also to the Vision OS platform that Apple has.

Anytime Apple enters a market, it changes that market, and I think that's going to have the same thing happen with mixed reality, augmented reality, and virtual reality, that the developers will dive into it and create some incredible applications that will spread to other platforms as well. At the same time, you had Meta release the Quest 3 just a few weeks ago, or a couple months ago. That's a much more powerful mass market virtual reality headset.

Marcus Johnson:

Yeah, [inaudible 00:14:59]-

Yory Wurmser:

So, you've got a lot more people using kind of a mainstream virtual and mixed reality. And then you have a bunch of niche devices coming out as well that are based around AI. So, you have Meta, the Ray-Ban Stories, the second generation of those that has Meta AI built into it. That's a really interesting take on smart glasses in that it provides interactivity through audio. It has a camera in it, you can take pictures, but it has essentially a conversational response. You can talk to it, you can refine your questions back and forth. Really interesting way to interact with immersive media.

And finally, artificial intelligence is also going to make the generation of 3D images and worlds and things like that much easier to do. So, I think the actual programming which has been extremely intensive around a lot of this stuff will be easier and much more accessible, and that should also superpower development of AR, VR, and mixed reality. So, all of those things I think should contribute.

Marcus Johnson:

Two quick questions from me. One, you said that the Apple Vision Pro device, you're expecting it to do what others can't. What are we thinking there?

Yory Wurmser:

Well, I mean its rendering is better. It has better cameras, better sensors in there. It also I think has a very quick reaction time. It has almost no latency. But I think most importantly is the developer platform. It just sort of is integrated with an elegance that Apple has done in the past. And I think the applications that will be in it will be a lot more intuitive to use and a lot more accessible for users.

Marcus Johnson:

And then the final question from me is talking about immersive media and AI devices... Or, sorry, AI, VR, AR devices. The Ai Pin, do you think it has a bit of a messaging issue, Jason? Aten of Inc was pointing out that the ads for the Ai Pin are that it's basically something that sits on your shirt, and you can pin it to yourself, and it's an AI device that the value proposition was supposed to be that you don't need your smartphone. You can just talk to this thing and it can respond to any command.

But Jason Aten of Inc was saying you could just use an Apple Watch, and that Humane is selling people on the idea that it's basically made a smartphone without a screen and a better version of Siri. Do you think that the Ai Pin is going to kind of fall flat on its face, or do you see it having legs later down the road?

Yory Wurmser:

I think it's a fair criticism. I think the actual pin itself is a gateway to an AI interface which you can have with your smartphone. So, in that way that criticism is accurate. It has some really cool features. The laser projection onto your palm so you can actually see projected words or information onto your palm.

It's really cool. I don't see it being a big hit, but you have Humane's Ai Pin and you also have OpenAI reportedly developing its own version of some sort of wearable or personal AI device that also is going to be distinct from a smartphone. So, we'll see.

Jacob Bourne:

Yeah. I think the Ai Pin is almost an iterative step here. I think the goal that companies want to get to is to have an ambient AI companion that you don't need to log into something or take out a device to use. It's just with you all the time and you can talk to it, and what form that takes I don't think has been nailed down yet, but I think it's the ultimate goal.

Marcus Johnson:

Okay. All right, gents, that's it for round two. We move to round three, the Show-Stopping Arguments. Our chefs will pull out their best closing arguments as to why their trend is most likely to happen. Why, Gadjo, do you think that your take about on-device AI features boosting flagging PC and smartphone sales is the best take today?

Gadjo Sevilla:

I think it's just the timing. For a lot of these industries, they've sort of had multiple years of losses. So, they're really banking big on on-device AI features to sort of push the needle. It may not take off this year, but it's definitely a huge start for them. And the same way we saw AI adoption in the past year, we're likely going to see it spread out into products and devices more rapidly in 2024.

Marcus Johnson:

Jacob, gen-AI will make content less trustworthy.

Jacob Bourne:

Yeah. I think unfortunately it's going to be an inevitable problem. The reason for that is that if the pace of generative AI is advancing, again, just like we saw last year, and this year it's going to continue advancing very quickly, outpacing steps by regulators and then the steps by tech companies to implement safeguards. Basically outpacing the ability just to react to it during a time when we have a critical political environment.

Marcus Johnson:

And finally, Yory, immersive media taking a qualitative leap.

Yory Wurmser:

Well, you have the big tech powerhouses, many of them entering with powerful new devices. Whether it's Vision Pro from Apple or Meta's Ray-Ban Stories and Quest 3, and OpenAI's possible AI device as well. You just have a lot of innovation coming from some really powerful actors.

Marcus Johnson:

Yeah. Very nice, gents. That's it for the Great Behind the Numbers Takeoff for Tech Trends 2024. We crown a winner, and today we will crown... Jacob! Jacob's argument I think just edged the other two out. All really good arguments, but Jacob, I feel like yours is going to build and build and build throughout the year and kind of crescendo at the end of the year with the US election. So, I do see that having maybe a greater impact just because... Maybe there's some headlines bias in there. I think it's going to be covered quite a lot.

But awesome, fantastic takes there, gents. For more tech trends of the year, you can read Yory's full report, called Tech Trends to Watch in 2024; Major Changes in Store for Search, Connected Cars, and Immersive Media. Links in the show notes, or you can head to insiderintelligence.com to read the full report there as well. That is all we have time for for this episode. Thank you so much to my guests. Thank you to Yory.

Yory Wurmser:

Always glad to be here.

Marcus Johnson:

Thank you to Gadjjo.

Gadjjo Sevilla:

Thanks. This was fun.

Marcus Johnson:

And thank you to Jacob.

Jacob Bourne:

Thanks so much. Pleasure to be here.

Marcus Johnson:

Today's Behind the Numbers Takeoff champion. Thank you to Victoria, who edits the show, James, Stewart, and Sophie, who helped make the podcast possible, and thanks to everyone for listening in. We hope to see you tomorrow for Behind the Numbers Daily, an eMarketer podcast.