May 22, 2024 / The AI hype machine

[HALF SECOND OF SILENCE]

[BILLBOARD]

*<CLIP> CHATGPT 4o VOICE, “SKY”: Hey there! What’s up? How can I brighten your day today?*

DAVID PIERCE (host): Does that voice… remind you of somebody?

*<CLIP> SAMANTHA, “HER”: Hi! How ya doin?   
 THEODORE: I’m well….*

SCORING <The Movement of Technology>

DAVID: OpenAI is actually pulling Sky – the new voice for its new chatbot – just days after rolling it out. Because it sounds too much like a certain Spike Jonze character.

*<CLIP> ADELE, “SNL”: Ladies and gentlemen… HER.*

DAVID: In the past week or so, a bunch of companies have announced a bunch of new AI tools. And THIS is becoming something of a pattern. Roll out a flashy new AI product. Something glitches horribly. Roll it back in.

But weren’t the CEOs JUST telling us that they were gonna change humanity forever?

*<CLIP> OPEN AI SAM ALTMAN: We're gonna do this. It's gonna be net great, but it's gonna be a technological revolution. And... those always come with change.*

DAVID: Ahead on *Today, Explained*: AI’s hype… vs. AI’s reality.

SCORING OUT

[THEME]

DAVID: It’s *Today, Explained*. I’m David Pierce, filling in as host today.

Will Knight is here with me. He’s a senior writer at WIRED, where he covers artificial intelligence. Which means that last week, he, too, was watching Google’s annual developers’ conference.

WILL KNIGHT (*WIRED* senior writer): And this year, as you can imagine, was just 110% AI. Generative AI in everything, you know, turned up to 11. It was the most AI event they've put on and probably the most AI one I've ever seen.

*<CLIP> DJ MARC REBILLET, GOOGLE I/O: Everyone get out your computers. It’s time to have ourselves a nice Google!*

SCORING <Insights>

WILL: Yeah. So I think the most noticeable thing is going to be the change to search they showed – I mean this is their cash cow, huge business. And it's so important for many other businesses. Right. And they are rolling out this, these AI overviews which are generative AI summaries of the search results. Instead of having to go through all these links, you know, ideally it will summarize it for you as if the AI has gone off and read all the web pages and it's got all the answers.

*<CLIP> GOOGLE EXEC LIZ REID: So whatever’s on your mind, and whatever you need to do, just ask. Google will do the Googling for you.*

WILL: It doesn't always mean the answers are going to be right…

*<CLIP> THE VERGE EDITOR IN CHIEF NILAY PATEL, VERGECAST: Someone was pointing the camera at a broken film advance lever on an SLR - like a film SLR camera // and the question was: why can’t I advance this thing? Why is the lever not moving all the way to advance the next thing…The answer that Google delivered in its own video and highlighted is the most wrong answer.*

WILL: But it does also really threaten to kind of upend this symbiotic relationship that companies have had with, with Google because it means no longer people have to – necessarily have to go and click on those links.

TINY SCORING BUMP

*<CLIP> GOOGLE EXEC SISSIE HSIAO: And this summer, you can have an in-depth conversation with Gemini using your voice.*

WILL: They showed off new versions of Gemini, which is their answer to ChatGPT, which can see things and talk to you, as it sees the world. So it's almost like a little robot in your pocket where you can, like, show things.

*<CLIP> HSIAO: We’re calling this new experience “Live.” When you “go Live”, you’ll be able to open your camera so Gemini can see what you see, and respond to your surroundings in real time.*

WILL: One of the other things that caught my eye was they start to show off, what they call – and other people call – agents. These are AI programs you don't just talk to, but you'll give them a task and they'll go off on the web and try to complete it. The idea is that this could be a totally new way to sort of use computers.

*<CLIP> ALPHABET CEO SUNDAR PICHAI: It’s pretty fun to shop for shoes. It’s a lot less fun to return them when they don’t fit. Imagine if Gemini could do all the steps for you: searching your inbox for the receipt, locating the order number from your email, filling out a return form, and even scheduling a pickup.*

SCORING OUT

*<CLIP> PICHAI: That’s much easier, right? <applause>*

WILL: Having played with some open-source ones – I've played with some of these, people have cobbled together these tools – They are equal parts really, really amazing and you can see the potential… and equal parts bonkers. And they go off the rails and do something and you – the stakes are that much higher if you're, like, sending emails or changing your calendar or you've given it your credit card or something. So if they can figure out how to make them reliable – which I don't think they can quite do now, so they have to really limit what they can do – then I think it could be really transformative. And the usefulness, I think, is less clear. It's – it depends if they can get them to actually work.

DAVID: It does seem like it's kind of an amazing baseline that we’re still at, that, ‘If only they actually work, how cool that would be.’

WILL: <laugh>

DAVID: Well, the announcements keep coming. One way or another, they’re gonna keep launching stuff. And the other one was what, like 24 hours before Google, OpenAI did a big launch. Compare and contrast the vibes for me. Google has a big giant developer conference. What did OpenAI do?

WILL: Yeah. This was a much more small, small-scale, intimate thing just at their headquarters.

*<CLIP> OPENAI CTO MIRA MURATI: Today, we are releasing our newest flagship model. This is GPT 4o. <cheers>*

WILL: The CTO on stage, with a couple of engineers showing off the new chat ChatGPT. I will say that the vibe was also somewhat bonkers because they showed off this cool, impressive new model, but they also revealed that the latest thing they've done is make it, you know, remarkably like the AI from “Her.”

*<CLIP> ENGINEER: Hey, Chat GPT.   
 SKY: Hey there, what’s up? How can I brighten your day today?*

WILL: In that it's kind of inclined to flirt with people.

*<CLIP> SKY: Wowwww, that’s quite the outfit you’ve got on.*

WILL: Which is a twist, a plot twist, I wasn't expecting.

DAVID: <laughs>

*<CLIP> ABC NEWS: OpenAI’s new voice-enabled chatbot is getting attention not for its ingenious tech – but because it sounds suspiciously like US actress Scarlett Johansson.*

*<CLIP> TODAY: Johansson says Open AI Sam Altman wanted to hire her to voice Sky, but she declined due to personal reasons. She points out Altman insinuated the intentional similarity when he tweeted a single word – her – the day that ChatGPT product was announced.*

WILL: So they just said that they were going to change the voice because, because of this backlash over the over, it being a little bit too like Scarlett Johansson and a bit too sexy.

DAVID: Yeah. So what else did OpenAI announce? They had the, the new voice, which was definitely kind of the star of the show. The not-Scarlett-Johansson but kind-of- Scarlett-Johansson voice. What else did we get from OpenAI?

WILL: Right. So they showed that underneath the hood they have this new model which was ChatGPT 4o which is a completely new, re-imagined model which takes video and audio. So it can do the voice. But it, it can it can handle video as well. So they showed all these examples where you, in real time, you can talk about what you're seeing.

*<CLIP> SKY: Show it to me whenever you’re ready.   
 ENGINEER: What do you see?   
 SKY: Aww! I see “I love ChatGPT”, that’s so sweet of you!*

WILL: The idea here is that you may have this kind of new paradigm in personal computing where you've got something that's always seeing what you're seeing. It can remember where you left the remote control. It can help you tell you about everything you're looking at. We were expecting maybe a brand new, super powered new model, which is going to be able to do way more things and be way more intelligent. So it's – it does feel like a little bit of a cop out or a, you know, a bit of a swindle that that's the new kind of AI is just happens to sort of have more of a personality, as it were.

DAVID: Mhmm. Do you think we're getting inklings of what the, the kind of first huge killer app of AI is going to be? I mean, you mentioned Search, which seems like it has the potential to be one. Maybe it is just chatting with a stranger, maybe it's some of the agent stuff that we're seeing. What is your sense of – are we getting glimmers of where this is going?

WILL: I don't think we've seen the – what would be the killer apps. I think, there could be, you know, huge companies built on top of kind of quite mundane-seeming, much less sort of sexy, uses of AI, and, and these models that just, you know, automate all sorts of tasks and that, that could be a really big financially. I don't I haven't seen something that's like, oh, this is – this is really going to change everything. I mean, that was one of the fascinating things with ChatGPT. It was clearly a really big research advance and it was wild to play with it. But it was never the case that you could say, ‘Oh, this I can really see how this was going to change work.’ Even in cases where people would say, ‘Oh, it's, you know, you can write essays with it, you can do…’ But there were all the problems with it. And I mean, you can already copy essays off the, off the internet, right? I mean, people, people do use these tools. I think they sort of crept into their workflow somewhat in sort of smaller ways. But it's not like we've seen, like, this completely killer app akin to something like the, you know, the smartphone or the internet. Yet.

DAVID: And then in the, in the midst of all of this, there are, what I would call ongoing staffing machinations at open AI in particular.

WILL: Mmm.

DAVID: Which have been going on for, what, the better part of 7 or 8 months at this point? What happened this past week?

WILL: Yeah. So this past week – well, just after the OpenAI announcement – Ilya Sutskever, who's one of the co-founders, really the sort of technical brains of the company from the, from the beginning. And one of the people who tried to oust Sam Altman, the CEO, sort of finally announced he was he was stepping down as a lot of speculation that would be very difficult for him to carry on, having tried to boot out the CEO. He led this team, though, that was focused on long term AI safety. So if you remember, after ChatGPT, you'd have all these people coming out and saying, oh, right now we think that this, this technology's not only the biggest thing since fire, it may destroy humanity, which was which seems kind of, very outlandish. But it became very much the norm for people to talk about. ‘Well, we need to really focus on these long term risks because we think it's going to get just get more powerful.’ So he led this team that was focused on that. And they pretty much all quit. And the ones who were from remaining have all been folded into other parts of the company. So it raises the question, is that – was that overblown? Do they not care about that anymore? OpenAI will tell you that they still have researchers focusing on that and the leaders put out a statement saying, ‘Well, we still really care about this.’ But it certainly the, the speed has changed and it's changed because Google came along and said, ‘Well, we're not going to sit back and let OpenAI just overtake us. And so we're going to move much more quickly’ – because they were being quite cautious to begin with.

SCORING <Data Brain Alternate>

WILL: And we've seen the companies sort of releasing these tools and then discovered that there are issues with them. You know, Google had this image generator that was generating kind of inappropriate, historically really weird, incongruous images because they were trying to be quite politically correct with what they were putting out, and they had a huge backlash around that.

*<CLIP> FOX NEWS: Today’s New York Post cover shows this AI rendering of George Washington – well, he looks awfully tan!*

WILL: So you can see they're moving quite quickly and then fixing things after the fact, which isn't exactly what you might want if you think this stuff might really go off the rails.

DAVID: Will Knight, at *WIRED*. Inna minute, we’re gonna ask whether the problems with these AI tools… are fixable.

[BREAK]

[BUMPER]

*<CLIP> REBILLET: Google.com. What is it? What does it mean? Why are we here? No one knows. And you’re not going to find out. Not* Today *–*

DAVID: –*Explained*. We’re back. Tech CEOs have been hyping our AI future for a while now.

*<CLIP> PICHAI, 60 MINUTES: You know, I’ve always thought of AI as the most profound technology humanity is working on – more profound than fire or electricity or anything that we have done in the past.*

DAVID: Julia Angwin is a *New York Times* contributing Opinion writer and founder of *Proof News*. She argues that the product demos we saw last week… are, let’s just say, not quite on the level of FIRE just yet.

JULIA ANGWIN (*NYT* contributing writer): Well, I felt really vindicated by those announcements because I think that they were really underwhelming. You know, Sam Altman promised us that he was going to show us something magic. And it was kind of a routine update, like you would see, you know, the new iPad. Actually, it was probably slightly more magical than this update of OpenAI. Same thing with Google, right? They pulled out all the stops for this announcement.

*<CLIP> REBILLET: Google!*

JULIA: But like, I, I'm hard pressed to tell you anything that really was, like, a compelling like, ‘Oh my God, I'm so excited to try this.’ And so I feel like the problem is that they started the AI conversation with AI is so smart that it's going to kill you. Like, where do you go from there? <laughs> Right? <laughs>

DAVID: <laughs> Yeah.

JULIA: Like it's really hard when like the gap between that and the reality is that it can't really answer even the basic question. And then the gap just gets wider and wider.

DAVID: Yeah. So with, with that as kind of the hype machine, where do you feel like we are in real-world, like, ground-truth AI stuff? What is your sense of where any of this stuff actually is right now?

JULIA: Well, I mean, if you just look at the studies, it kind of consistently comes back to AI is like a 50-50 coin flip. You look at medical diagnoses, right. There's a bunch of papers, the most recent one that I looked at from Stanford's Human Centered AI lab shows that when they were looking at how AI performs on citing medical studies, it was basically 50% the evidence didn't support what AI was saying, right? Even, some of the spectacular things that were, touted, like I remember when ChatGPT supposedly aced the uniform bar exam and they said that they had scored in the 90th percentile. Like, a new study from an MIT researcher actually found that it was in the 48th percentile. You know, so we're seeing that it does more than maybe would have expected a computer to do a couple of years back. But it's not reliable. Coders who work with this, with AI as, like, a coding assistant will tell you, you have to know enough to debug the code that it generates for you. So it requires a bit of expertise, basically, to fact-check the AI.

DAVID: So what do we do with that though? Because on the one hand, 48th percentile on the LSAT is something? It's better than my computer would have – it's better than I would do on the LSAT, I suspect.

JULIA: Yeah, definitely. Me too for sure.

DAVID: On the one hand, cool when it tells you the truth. On the other hand, I now have to go fact check it every single time. And so maybe we've accomplished nothing, because I have to just go do the work that it did to make sure that it's telling me the truth this time. So, I don't know. I'm so torn, in this moment, whether to be impressed that we've made any progress at all, or totally annoyed by the fact that the progress we've made just makes me do even more work.

JULIA: Yeah. I mean, this is why in my piece in *The New York Times*, I referred to it. I was like a bad intern whose work you have to check, right?

DAVID: Yeah, that’s good!

JULIA: Because it's basically like, you know, sometimes you get a great intern and they are, like, producing great stuff and sometimes you don't. And and sometimes it's more work than, than actually just not having help.

DAVID: Right.

JULIA: And so I feel like we're kind of in that space that I think it wouldn't be as frustrating, honestly, if they hadn't promised us that we were on a steady march to what they call artificial general intelligence, which is this sort of mythical concept that there's got to be one AI machine that can do everything right, like it's going to be an expert at chess and at like, drone strikes and law and medicine. And, you know, none of us knows a human being, right, who has all of those expertise. And so they have told us, like, this is moments away. We're, we're almost there. In fact, we are so close to being there that we're worried. And I think that that is the problem is that we were told that, and then we have the reality of the ground is so different than that.

DAVID: Yeah. So on that front, let's run with the intern analogy a little bit here, because if you have a bad intern, the theory in it supposedly is that you can teach that intern how to be better. Right. And that the work you're putting in to do twice as much work because the intern’s a doofus comes back in the end, because you eventually teach the intern how to do the job. And I would think there's that there's some of that happening in AI. But you've also described some pretty big barriers between where AI is and where all of these folks are suggesting that it might go and is worth waiting for. Can you walk me through some of the the big barriers? Between here and there.

JULIA: Well, first of all, I do want to say, like, it's definitely possible we're going to get better interns out of this eventually. But I think there are some major barriers.

SCORING <Cycles>

JULIA: One major barrier is energy use. So AI is incredibly expensive in terms of its energy use, It's why there are really only the big tech companies are actually only the really main ones able to compete in this space because you need incredible cloud computing resources. And then they're running up against energy uses – basically they need these energy intensive data centers to power this AI models.

*<CLIP> YAHOO FINANCE: One study finding that training a single LLM program takes the same amount of energy as it takes to power 120 homes for an entire year.*

JULIA: Microsoft just broke ground on a new one. But in Virginia, like the data center that I think it's the somebody who runs the data centers there said, like we are, we're done. Like we can't expand any more. Sam Altman has said we have run into an energy wall…

*<CLIP> ALTMAN, LEX FRIDMAN PODCAST: We’re going to want an amount of compute that’s just hard to reason about right now.   
FRIDMAN: How do you solve the energy puzzle? Nuclear…  
ALTMAN: That’s what I believe.  
FRIDMAN: Fusion…?  
ALTMAN: That’s what I believe.   
FRIDMAN: Nuclear fusion?   
ALTMAN: Yeah.*

JULIA: So. So they have an energy barrier. They also have a data barrier, the current hypothesis for AI is that you need more and more data to make your models better. I think I just want to put a pin in that, that that may or may not be true, but if it is true and that's what they're operating under, like they have already scraped all the data that is available on the public internet. And, you know, as we have seen from the lawsuits by New York Times and Authors Guild, it was not a consensual scraping…

*<CLIP> COMEDIAN SARAH SILVERMAN, “THE DAILY SHOW”: And just to be clear, I’m not trying to shut down AI or turn the clock back – I just want guardrails, so that AI fairly compensates the people whose work comprises its entire brain.*

JULIA: So there's two problems. One, all those people are suing them and may want their data back out of those models. And two, they're talking about basically creating synthetic data to train their models. So basically having the AI invent data to then make their models bigger. And then people have talked about that leading to, like, model collapse. And so, you know, you have two huge inputs into AI, both of which are looking pretty shaky. And so it does, I think, raise the question of, like, how much exponential progress they're going to continue to make.

SCORING OUT

JULIA: And I would say this: I think there is an interesting question about whether bigger is really better. There are a lot of really interesting experiments being done where scientists, doctors are putting more qualified, smaller data sets together and then trying to build AI applications on top of those. And I haven't seen enough to know yet how successful those are going to be. But I think that's a really interesting question. Like, I would feel more comfortable myself querying an AI model that was only populated by, like, peer reviewed medical studies, for instance. Right. And so I think there could well be an interesting AI future that involves a lot more specialized models. And that would make sense, by the way, with the history of technology, right? Specialized machines have generally been what we rely on. And so the idea that AGI- that AI I was going to be that was always kind of weird.

DAVID: Totally. So let's just go glass half full here for a minute and put on our rose colored augmented reality glasses. Okay. The problems you're describing, especially these kind of big infrastructural ones. Are they solvable? Is there a world in which we get through some of these big barriers in the next few years?

JULIA: I think maybe, I always would say that you have to bet on American ingenuity, right? What's one thing about this country that is wonderful is that when we want to do something, you know, kind of no holds barred, we try to figure out how to do it. But I think the question is, at what cost, especially on the energy side, is it worth pouring all this money into bigger and bigger AI models and data centers, or should we have a nationwide EV supercharging network so everyone can have an electric vehicle? Like you know, we're in a world where everything has a trade off. And so I guess the question I have is, yeah, maybe we could if we put all things aside and decided like, this is the thing that we want. I'm just not sure the return on investment is worth it.

DAVID: Well, there are some folks arguing for precisely that, right? I mean, Sam Altman is out here saying pretty straightforwardly and without a hint of irony that it might cost trillions of dollars to get AI to the point where we need to, and making the case that that is the correct use, because the benefits at the end will be so huge and so society serving that it'll be worth it. Not to put words in your mouth, but I'm guessing you're fairly skeptical of that argument.

JULIA: If you were going to make that claim and have it be believed, you have to show some evidence, right? And like the reality is he's a little bit the boy who cried wolf. He said so many times how much magic we're going to see just on the next round and the next model. So I would believe it if, like Yann LeCun said it because he's been much more measured, he said. You know, at Meta, he's an AI pioneer. And he says, ‘Look, it's going to take forever. We are nowhere near close, and it's going to take a lot of hard engineering and iteration.’ And like, that feels like right to me.

SCORING <Google I/O DJ Set>

DAVID: Julia Angwin, *New York Times* contributing opinion writer and founder of *Proof News*.

Today’s show was produced by Amanda Lewellyn, edited by Amina Al-Sadi, fact checked by Laura Bullard and engineered by David Herman with help from Andrea Kristinsdottir.

I’m David Pierce and this is *Today, Explained*.

**[10 SECONDS OF SILENCE]**