

**SDS PODCAST
EPISODE 892:
WE'RE IN THE AI
“TROUGH OF
DISILLUSIONMENT”
(AND THAT’S GREAT!)**



Jon Krohn:	00:05	This is episode number 892 on the AI Trough of Disillusionment.
	00:19	Welcome back to the SuperDataScience Podcast. I am your host, Jon Krohn. It's been a while since we've done this, but I'm finally back to doing some reviews of the show. The first one here is from Apple Podcasts. Someone named Dark Horse Lover on Apple Podcasts says that SDS Podcast makes for great conversation. They say, "Thank you for making data science accessible to everyone. Whenever I meet a data scientist in the D.C. area, I always make sure to mention your podcast." Presumably that's Washington, D.C., and yeah, I appreciate that.
	01:00	The second review is here from Penelope Bellegarde in the UK. She says, "I don't know how you do this, putting together such incredible conversations week in, week out." And the most interesting thing about Penelope's Review is that she says that she actually has a comment on the ads that we run on the show. So we're a sponsor-supported podcast. We have to run the ads to keep the lights on to make this show, and I always hope that the ads are interesting to you. And Penelope says in her review, "I was listening to episode 885 on Python pollers and a few ads/sponsors were mentioned, and they were valuable." She says that she thought to herself, "Even the ads are actually not only relevant, but valuable information in themselves, and that is very rare."
	01:51	So that's awesome. I think that's one of the first reviews we've ever had that mention the ads, and yeah, I'm glad to hear that. You certainly hear messages that you wouldn't hear anywhere else. They are very much tailored to a hands-on AI practitioner, data scientist audience. And so yeah, I'm glad that at least one person finds them useful. Thanks to everyone, Dark Horse Lover, Penelope Bellegarde for all the recent ratings and feedback on

Apple Podcasts, Spotify, and all the other podcasting platforms out there, as well as of course for all the likes and comments on our YouTube videos.

02:30 Please do leave ratings. I think they're helpful for us to be recognized in the podcasting platforms and get more listens, which allows us, of course, to make more episodes for you. And if you leave written feedback in the Apple Podcasts app, I will be sure to read it on air like I did today. I did just discover that all the reviews that I'm seeing are all in the US platform, but I just figured out a way that I could change the URL and see feedback in other regions as well. So I might have a bunch more feedback coming for you on upcoming Fridays.

03:07 Anyway, let's get to the meat of today's episode. Today, we're diving into a shift happening in the AI landscape right now. One that might surprise you and perhaps even be worrying given all the hype that we've been hearing about AI. So while tech giants continue pouring billions into AI infrastructure, many organizations are hitting a wall when it comes to actually implementing AI, particularly generative AI in meaningful ways. Let's explore in this episode over the next few minutes, what the heck is going on.

03:40 So the key piece of context is that Fortune 500 executives are increasingly expressing frustration and disappointment. They say things like, "I don't know why it's taking so long. I've spent money on AI, but I'm not getting a return on the investment." This kind of sentiment is spreading across corporate boardrooms, and I have data to back it up. According to survey results from S&P Global, 42% of companies are now abandoning most of their generative AI projects. Almost half of companies surveyed are abandoning their gen AI projects. And that is a huge jump over last year where just 17% of firms were responding that they were abandoning most AI

projects. So that's a jump from 17% of gen AI project abandonment up to 42% this year.

- 04:29 Even companies like Klarna, the Swedish buy now, pay later provider recently admitted that they went too far in replacing customer service jobs with AI, and they are now rehiring humans for some of those roles. What we're witnessing here is what Gartner calls the trough of disillusionment, Gartner, the big consumer reviews agency. Probably lots of people are familiar with their Hype Cycle. And the trough of disillusionment that we're in is an inevitable phase of their famous Hype Cycle that follows the initial euphoria around new technology. It's in this trough of disillusionment where reality meets expectation and the gap between them becomes painfully clear.
- 05:19 Now, here's what makes this particularly interesting. While businesses struggle, consumers are embracing gen AI like never before. Sam Altman recently revealed that ChatGPT is being used by 800 million people per week. That's double the usage from a few months ago in February. The technology clearly has appeal, but translating that consumer enthusiasm into systematic business transformation, that's so far proving to be a much tougher nut to crack.
- 05:47 So why are companies struggling? Several reasons stand out. First, their data are often trapped in silos and legacy IT systems that make integration challenging. Second, there's a serious shortage of technical talent with the skills needed to implement these systems effectively. Third, and this one's crucial, companies have brands and reputations to protect. They can't afford to have an AI bot make damaging mistakes, expose customer data, or violate privacy regulations. The stakes are simply too high.

- 06:19 Meanwhile, the hyperscalers, Alphabet, Amazon, Microsoft, and Meta, they continue their massive AI infrastructure investments. Pierre Ferragu, I hope I'm pronouncing that correctly, from New Street Research points out that these hyperscalers' combined capital expenditures are on track to hit 28% of revenues this year. That's more than double the 12% of revenue these firms were spending on CapEx a decade ago. So that means that these hyperscalers, these superscalers are betting big, but the question remains, will they generate healthy enough returns to justify this unprecedented spending spree?
- 06:56 At recent developer conferences, tech leaders like Microsoft's Satya Nadella and Google's Sundar Pichai painted an optimistic picture. Of course they did. They talked excitedly about platform shifts and an emerging agentic web where semi-autonomous AI agents interact with each other on our behalf. They highlighted how AI models are getting better, faster, cheaper, and more widely available. They even introduced new metrics like the number of tokens processed to demonstrate booming usage. But notably absent from these presentations, traditional business metrics like sales or profit growth from AI initiatives suggesting maybe it's not going that well. The reality is that most cloud revenues from AI are coming from AI labs and startups, many of which are actually funded by these same tech giants. So it's a bit of a circular economy at this point.
- 07:48 However, the hyperscalers are applying AI to their own operations with some success. Google has launched AI summaries in search results. Those reach over 1.5 billion people monthly. You've probably seen them. And they've integrated gen AI into their ad business. Meta has likewise woven AI into its advertising platform using its open source Llama models, which I've talked about on the show countless times. Microsoft has embedded AI into its

Workplace apps and the GitHub coding platform with things like GitHub Copilot. And Amazon is using AI to improve product recommendations and optimize logistics.

- 08:27 These internal applications might even help reduce costs. Microsoft recently laid off 6,000 workers, many reportedly software engineers as AI tools make certain programming tasks more efficient. If these efforts succeed, they might encourage other companies to keep experimenting until they too can make AI work effectively. The cost of falling behind in the AI investment race is already evident at Apple, which was slower to embrace gen AI than the other big tech firms. Their attempt to rebuild Siri around large language models has been so bug-ridden that the rollout had to be drastically postponed. It's a cautionary tale about the risks of both moving too fast and moving too slow.
- 09:08 So if AI is currently in the trough of disillusionment, when will we emerge from it? Analysts from Gartner predict it will last until the end of the year. In the meantime, there's serious work to be done. Microsoft's CTO, Kevin Scott points out that for AI agents to fulfill their promise, they for example, need better memory systems to recall past interactions. The web also needs new protocols to help agents access various data streams. Companies are working on standards like Model Context Protocol, MCP, to address these challenges. And if you want to hear more about MCP, I did a recent deep dive into that in episode 884 of this very podcast.
- 09:50 All right, so here's the key insight from all of this. Many companies say what they need isn't necessarily cleverer AI models, but more practical ways to make the technology useful. This is what we can call the capability overhang. We have more AI capability than we know what to do with. The challenge isn't building better models, it's

figuring out how to apply what we already have in ways that create real business value.

- 10:18 This opportunity incidentally, is exactly why I founded my new consultancy, Y Carrot. But this episode isn't about that, so I'll just leave it there. At Microsoft's Build conference last week, Anthropic CEO, Dario Amodei urged users to keep the faith in AI, particularly given how quickly AI progress is happening. Dario said, "Don't look away. Don't blink." It's good advice because of how fast things are moving.
- 10:43 While we're definitely in the trough of disillusionment right now, this is actually a good thing because troughs have two sides. So expectations are currently mismatched, but what follows in Gartner's Hype Cycle is the slope of enlightenment where practical applications emerge and real value gets created. The lesson here? Transformative technologies rarely follow smooth adoption curves. The Internet went through similar phases, so did mobile computing. The current AI trough doesn't mean the technology has failed. It means we're entering a more mature phase where hype gives way to hard work and real applications emerge from experimentation.
- 11:25 For you data science professionals and business leaders out there listening, that means this trough is actually an opportunity. While others grow frustrated and pull back, those who persist in finding practical focused applications for AI, who solve the integration challenges, build the right teams, and manage the risks effectively, will be the ones who emerge strongest when we all climb out of this trough. The AI revolution is getting real, and that might be the best news of all.
- 11:52 If you enjoyed today's episode or know someone who might, consider sharing this episode with them, leave a



review of the show on your favorite podcasting platform, like I mentioned at the top of the show, tag me in a LinkedIn or Twitter post with your thoughts, and if you aren't already, obviously subscribe to the show. Most importantly, we just hope you'll keep on listening. Until next time, keep on rocking it out there, and I'm looking forward to enjoying another round of the SuperDataScience Podcast with you very soon.