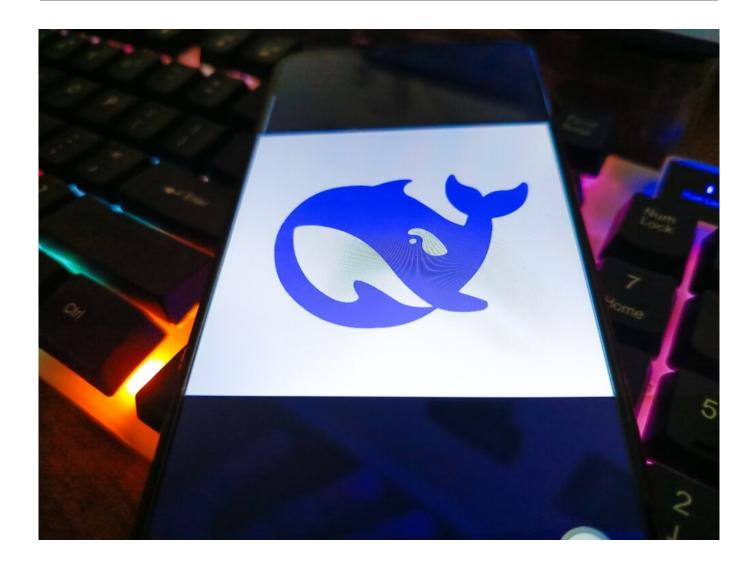


Analysis of today Assessment of tomorrow



By: Elise Quevedo

# DeepSeek-R1 AI arrives to elevate the large language model (LLMs) game



This week's big tech story comes from a littleknown Chinese company called DeepSeek. The AI world is abuzz with DeepSeek announcing its latest large language model (LLM), the R1.

You know a company is making waves when you try to sign up to test their service (I did this myself), and it takes you over 48 hours due to a notification that says, "Due to large-scale malicious attacks on DeepSeek's services, registration may be busy. Please wait and try again."

For those of us tracking the rapid evolution of AI, this wasn't just another product launch; it was a seismic shift in the landscape of artificial intelligence. DeepSeek's R1 isn't just another LLM; it's a statement.

This statement shows that the future of AI isn't just about who can build the most innovative model but also about who can build the most brilliant model efficiently.

DeepSeek has thrown down the gauntlet to its competitors, and I'm here for it. Let's start with the basics: What is DeepSeek?

For the uninitiated, DeepSeek is a relatively new player in the LLM arena, but it's quickly making a name for itself. Unlike the tech giants that dominate the AI conversation, think OpenAI, Google, and Anthropic, DeepSeek has positioned itself as a lean, agile innovator.

Its models are highly efficient in terms of computational resources and cost. The R1 is a leap forward in affordability and accessibility.

So, the question is, why is the world talking about DeepSeek R1 this week? Two words: cost efficiency.

### The implications of DeepSeek's R1 go far beyond cost savings

Training and running LLMs are known to be notoriously expensive. OpenAI's GPT-4 reportedly costs over \$100 million to develop, and the computational resources required to run it are staggering. DeepSeek, on the other hand, has managed to create a model that rivals GPT-4 in intelligence but at a fraction of the cost.

How? By focusing on optimisation. Here is the kicker: DeepSeek has developed innovative techniques to reduce the computational overhead of training and inference, making the R1 much cheaper to run and much more environmentally friendly. In an era where sustainability has become a key concern, this is a big deal.

However, the implications of DeepSeek's R1 go far beyond cost savings. This announcement was a wake-up call to the entire AI industry. It reminds us that the race for AI supremacy isn't just about building bigger and more powerful models; it's about building smarter and more efficient ones.

And in that regard, DeepSeek seems to be leading the charge.

Of course, DeepSeek isn't operating in a vacuum; two of its most prominent competitors are OpenAI and Anthropic. Let's look at how they stack up in light of DeepSeek's R1 announcement.

#### OpenAI: The Titan Under Pressure

OpenAI has long been the gold standard in the LLM world. Its GPT series set the benchmark for what's possible with AI, and GPT-4 is widely regarded as one of the most influential models ever created.

But with great power comes great cost, both financial and environmental. OpenAI's models are resource-intensive, and that's starting to become a liability. DeepSeek's R1 challenges OpenAI's dominance.

### Deepseek is forcing OpenAI to rethink its strategy

By offering a new model that is just as capable

but far more efficient, Deepseek is forcing OpenAI to rethink its strategy.

The question in everyone's minds is, can OpenAI continue to justify the astronomical costs of its models in the face of a more affordable alternative? Or will it have to pivot toward greater efficiency?

These are questions that OpenAI's leadership has to think about.

#### Anthropic: The Ethical Contender

Then there's Anthropic, the company behind another leading LLM called Claude. Anthropic has carved out a niche by focusing on ethical AI and alignment.

Although I have not tested this one yet, its models seem to aim to be safer and more controllable, which is why it has earned a loyal following among businesses and developers who prioritise responsible AI usage. But even Anthropic isn't immune to the challenges posed by DeepSeek's R1.

If Anthropic wants to stay relevant and competitive, it must find a way to balance its ethical commitments with the need for efficiency

While Anthropic's focus on ethics is commendable, unfortunately, it's not enough to compete on values alone.

The R1's cost efficiency and performance put pressure on Anthropic to deliver ethical AI and affordable and scalable AI. If Anthropic wants to stay relevant and competitive, it must find a way to balance its ethical commitments with the need for efficiency.

## DeepSeek's R1 Matters. But why?

Because it represents a fundamental shift in the AI landscape. The LLM race has been dominated by a few big players with deep pockets, as it often happens in any industry, for too long.

These companies have set the agenda, dictating the pace of innovation and the direction of the industry. But DeepSeek's R1 changes that. It proves that you don't need billions of dollars to compete in the AI space. What you need is ingenuity, creativity, and a willingness to challenge the status quo.

#### As LLMs become more powerful, they also become more resourceintensive

The R1 also highlights the importance of efficiency in AI development. As LLMs become more powerful, they also become more resource-intensive. This leads to concerns about the environmental impact of AI, as well as the growing divide between those who can afford to develop and use these models and those who can't.

DeepSeek's R1 addresses these concerns headon.

#### It's a New Era for LLMs

The announcement of DeepSeek's R1 is just the beginning. As more companies enter the LLM space, we're likely to see increased competition and innovation. This is good news for the industry, as it will drive down costs and push the boundaries of what's possible with AI.



For OpenAI, Anthropic, and other players in the LLM

space, the message is clear: adapt or risk being left behind

But it's also a reminder that the future of AI isn't just about who can build the biggest model; it's about who can build the smartest, most efficient, and most accessible model on the market.

For OpenAI, Anthropic, and other players in the LLM space, the message is clear: adapt or risk being left behind. DeepSeek has set a new standard, and it's up to the rest of the industry to meet it.

As for me, I am really excited to see where this journey leads. The AI revolution is far from over, and with players like DeepSeek pushing the envelope, I believe the best is yet to come.