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TECHNOLOGY ARTIFICIAL INTELLIGENCE

The Man Tasked With Rebooting Amazon AI

The company turns to Rohit Prasad to make it a stronger rival to the likes of OpenAI, Microsoft and Google

By *Sebastian Herrera* [Follow](#)

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As one of the chief architects of [Amazon](#)’s AMZN **3.13%** ▲ Alexa, Rohit Prasad has been at the vanguard of artificial intelligence. Now, he is leading the company’s effort to catch up in the AI race.

The Seattle company was taken aback by a surge in competitors’ AI capabilities. It turned to Prasad to upgrade the technology for its Alexa voice assistant and reboot the company’s AI ambitions.

Alexa—which is integrated into more than 500 million devices around the world—has been one of the dominant AI assistants, along with [Apple](#)’s Siri and Google’s Assistant. OpenAI released ChatGPT, and the AI race’s rules changed.

Amazon put thousands of people in a new team under Prasad to develop AI products for an Alexa upgrade and other businesses. The company has been building its own large language models—the software behind generative AI—and it is taking time to train and fine-tune the powerful technology.

While it is expected to unveil a new Alexa with AI as early as next month, Amazon insiders say the company has struggled to catch up with OpenAI, [Microsoft](#), [Alphabet](#)’s Google and others that fixated on the new AI earlier. Amazon’s proprietary AI models are still behind those of its biggest competitors, say insiders and industry analysts.

Amazon’s Alexa has been among the dominant AI assistants, with an upgrade expected as soon as next month.

PHOTO: ELIJAH NOUVELAGE/REUTERS

If Amazon cannot regain its edge in AI, it risks losing its position as a front-runner in tech innovation.

“At this point, they’re not leaders,” said Gil Luria, an analyst with investment bank D.A. Davidson.

Amazon has said it isn’t behind and that it is playing the long game with AI. No matter which company’s AI software succeeds, it expects soaring demand for its cloud business because of the intensive computing resources required. Chief Executive Andy Jassy has said he expects AI to drive tens of billions of dollars of revenue for the company over the next several years.

Amazon declined to make Prasad available for an interview. A spokesman for the company said it expects him to drive AI-model development in the way he led advances in speech-recognition technology.

Prasad, 48 years old, has long proclaimed that interactive AI is a challenging undertaking to build, even though the dream of such AI has been part of science-fiction novels, movies and television shows for decades.

“This need to communicate to a machine has been there for a reason in fiction,” Prasad said in an Amazon video in 2022.

As a child, Prasad first became interested in the potential of talking computers by watching “Star Trek.” He eventually became an expert in natural language understanding in machines and built his career around the technology. That background fit well at Amazon, which sought in the early 2010s to make a virtual assistant that could understand and respond to spoken commands.

Prasad previously led Amazon advances in speech-recognition technology as head scientist for Alexa. PHOTO: AL DRAGO/BLOOMBERG NEWS

In 2023, Prasad’s role evolved from Alexa head scientist to leading the company’s most aspiring tech team. The group is trying to compete in the world of large language models and generative AI, the technology behind ChatGPT.

This article is based on accounts from people who have worked on Amazon’s AI efforts.

Making Alexa smarter

Amazon has worked on machine learning and other forms of AI for years. Still, the company was later than its competitors in building the large models needed for generative AI, which uses software trained on vast amounts of data to generate solutions. The technology can have conversations and respond to complicated instructions.

Within hours of ChatGPT’s release in late 2022, Prasad’s Alexa team started experimenting with it. They were impressed with how easy it was to use and the knowledge it could surface on various topics. Staff asked ChatGPT to generate code for Alexa features such as smart-home control, and its results were at times better than those from Amazon’s internal systems.

Prasad called a meeting with employees to discuss what impact ChatGPT might have on the tech industry. Within weeks, they devised a plan to catch up. Amazon accelerated work on a large model named Titan and started a newer model named Olympus. It planned to use its models to remake Alexa and deploy them in other businesses.

The company shifted thousands of employees to the new team under Prasad and labeled it the AGI group as a nod to its ambition to eventually develop artificial general intelligence, the next level of AI that can outperform humans.

Amazon [demonstrated a smarter Alexa](#) a year ago. The update—known internally as Remarkable Alexa—has taken longer than expected to get ready for release to the public. Delays in developing new products aren’t unusual for cutting-edge technologies.

Doing the basic and complex

Insiders say Prasad’s group has struggled with accelerated deadlines and getting its company-created AI to work properly. Goals have changed often, deadlines have been rushed and the group has sometimes proven too unwieldy to innovate quickly.

Before the ChatGPT boom, Amazon had been adding to the tasks Alexa could handle, making the assistant work seamlessly across various products and trying to build a profitable business. Amazon has put Alexa into cars, microwaves and even eyeglasses.

Alexa is part of more than 500 million devices around the world. PHOTO: STEVE MARCUS/REUTERS

Prasad’s expertise for Alexa was natural language understanding and accuracy, answering common questions such as “What’s the weather today?” with few flaws. Before ChatGPT, not much work was being done with large language models and Alexa.

Amazon has struggled to use its latest internal AI models to overhaul the assistant. As Amazon infused large language models into Alexa, the voice assistant became less reliable for simple tasks. In some tests, for example, it lost the ability to turn on the lights with 90%-plus reliability.

The Amazon spokesman declined to comment about delays and troubleshooting on its latest AI projects.

Prasad said in an interview last year that generative AI’s creative and conversational capabilities can prevent it from reliably performing basic tasks.

“If you came in and said, ‘Alexa, I’m feeling hot here’ or ‘I feel this is too warm,’ it should come back and ask you, ‘Do you want to turn down the thermostat or lower the temperature?’ It shouldn’t tell you to go to the beach,” he told an analyst in [the interview posted on YouTube](#). “This is why AI is such a hard problem, because the context is so crucial.”

In-house technology

As with many tech companies, Amazon prefers to develop its own technology to have full control over its products and services. As the AI race has progressed, the company has increasingly leaned on partnerships. It invested [\\$4 billion in AI startup Anthropic](#) and recently [hired employees from Adept AI](#). It also has partnerships with [Meta Platforms](#) and others.

While Amazon had planned to depend on its own models for Remarkable Alexa, it later decided to integrate AI technology from Anthropic and others.

With Amazon planning to spend [more than \\$100 billion](#) over the next decade on data centers to help meet AI demand, the internal pressure to produce its own AI products has been growing. CEO Jassy has been more involved with the AGI group than is typical. He has met with its leadership about every four to six weeks.

Amazon is planning an event to show off new device updates that might highlight some of Alexa’s upgrades. It has planned to include a more conversational Alexa that can help draft messages and give advice on shopping. The company has considered charging consumers for the smarter Alexa.

Amazon’s competitors have also been launching chatbots and upgrading the capabilities they have.

Apple recently unveiled its Apple Intelligence system with a souped-up version of its Siri assistant. The system will be available on the company’s [new iPhone 16 models](#). Google recently introduced [a new generative-AI assistant](#) for its phones.

—*Jim Oberman contributed to this article.*

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