# AWS unveils groundbreaking AI advancements at re:Invent 2024



At the annual re:Invent 2024 conference held in Las Vegas, Amazon Web Services (AWS) unveiled a series of groundbreaking advancements in artificial intelligence (AI) aimed at enhancing accessibility and efficiency for businesses. The second day of the conference saw significant updates to foundational platforms, particularly the launch of Amazon Bedrock's new capabilities and the introduction of the Nova suite of foundation models, as reported by Arthur Goldstuck from Gadget.

Central to the AWS announcements was Amazon Bedrock, a fully managed service designed to facilitate the building and scaling of generative AI applications. Dr Swami Sivasubramanian, AWS Vice President of AI and data, highlighted the transformative nature of this moment, stating, “We are at a tipping point where generative AI is moving out of experimentation and into mission-critical applications. Businesses need tools that are not only powerful but also intuitive and cost-effective.” The new features of Bedrock—such as Intelligent Prompt Routing and prompt caching—aim to optimise costs and improve performance for generative AI queries. Sivasubramanian elaborated, “Prompt caching isn’t just about saving money – it’s about ensuring that businesses can scale AI solutions without sacrificing efficiency or accuracy.”

In addition, Bedrock Data Automation has been introduced, allowing businesses to convert unstructured, multimodal data into structured formats with minimal coding requirements—a move aimed at enabling firms to utilise their data more effectively. Sivasubramanian referred to this feature as a "game-changer," indicating its potential to eliminate a significant barrier to AI deployment.

The release of the Nova suite, which includes six foundation models, was another highlight of the event. Among these models are text-to-text and multimodal models capable of understanding and generating text, images, and videos. Shaown Nandi, AWS Technology Director, remarked, "We’re not saying our models are better than everyone else’s … we’re saying they’re different." The Nova models are specifically designed for integration within Amazon Bedrock, allowing for seamless functionality across different applications.

Further enhancing the AI toolset, AWS introduced new features for Amazon SageMaker AI. Improvements to SageMaker HyperPod were a key focus, enabling users to reduce costs significantly while maximising compute resource utilisation. Sivasubramanian noted, “Training large models is no small feat,” highlighting how new tools will simplify model training workflows and increase productivity.

AWS also showcased Amazon Canvas, a platform empowering users to generate high-quality media using text prompts—an offering designed for a wide audience, including marketers and designers who might not possess in-depth technical skills. Sivasubramanian described Canvas, stating, “It’s for marketers, designers, and creators who want to bring their ideas to life without needing deep technical expertise.”

Sustainability, education, and societal impact were recurring themes throughout the conference. AWS announced a $100 million initiative aimed at providing underserved students with AI and cloud computing skills, with Sivasubramanian commenting, “The future of AI isn’t just about technology. It’s about people.”

In a related announcement at the conference, the AWS platform saw enhancements to Amazon Q, featuring numerous new actions for business applications. These updates are expected to support businesses in analysing both structured and unstructured data more effectively. Noah Kershaw, Head of Product at marketing agency Kepler, expressed optimism about the updates, stating, “They make it easier for AI models to connect and access various sources when analysing campaign performance."

The conference also delved into the broader AI landscape, with recent shifts indicating a growing focus on AI deployment within businesses at a manageable cost. Commentary from analyst Jacob Bourne highlighted AWS's commitment to prioritising cost-efficient solutions. The industry’s growing recognition of the necessity for reliable, high-performance AI tools is underscored by recent transformations within AWS’s architectural approach to AI.

Through these announcements, AWS aims to reinforce its position in the expanding AI market while enabling organisations to adopt advanced technologies that can influence their growth trajectories across various sectors such as finance, healthcare, and marketing. The developments presented at re:Invent 2024 not only cater to current business needs but also suggest a direction towards a more integrated and user-friendly AI future.

Source: [Noah Wire Services](https://www.noahwire.com)

## References

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* <https://community.aws/content/2pnoldBeF6BFQi6sFw5JwANNwMk/amazon-bedrock-re-invent-2024-features-launch-summary> - Provides details on the new capabilities of Amazon Bedrock, including Intelligent Prompt Routing, prompt caching, and Bedrock Data Automation.
* <https://www.channelinsider.com/news-and-trends/us/aws-reinvent-2024-genai-sagemaker-updates/> - Supports the introduction of the Nova suite of foundation models and their integration with Amazon Bedrock.
* <https://community.aws/content/2pnoldBeF6BFQi6sFw5JwANNwMk/amazon-bedrock-re-invent-2024-features-launch-summary> - Explains the features of Amazon Bedrock, including its role in building and scaling generative AI applications.
* <https://www.channelinsider.com/news-and-trends/us/aws-reinvent-2024-genai-sagemaker-updates/> - Highlights improvements to SageMaker HyperPod for reducing costs and maximizing compute resource utilization.
* <https://community.aws/content/2pnoldBeF6BFQi6sFw5JwANNwMk/amazon-bedrock-re-invent-2024-features-launch-summary> - Details the launch of Amazon Bedrock's new capabilities, such as multi-agent collaboration and prompt management.
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