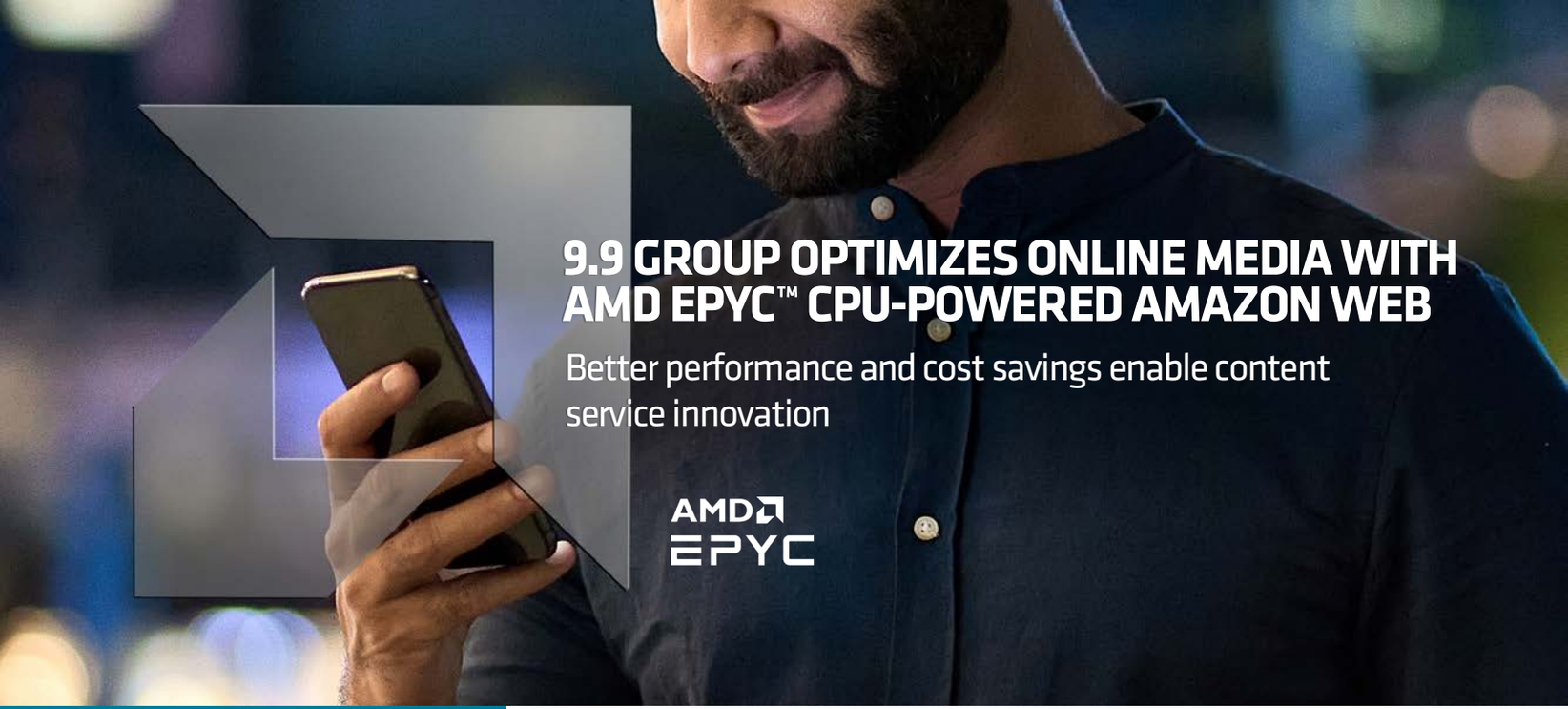

9.9 GROUP OPTIMIZES ONLINE MEDIA WITH AMD EPYC™ CPU-POWERED AMAZON WEB

Better performance and cost savings enable content service innovation

CUSTOMER

99GROUP

INDUSTRY

Online multimedia content delivery

CHALLENGES

Provide infrastructure with performance and cost effectiveness for fluctuating audience engagement and developing new services

SOLUTION

Switch to Amazon Web Services instances powered by AMD EPYC™ processors

RESULTS

35 percent cost reduction with 45 percent lower latency, enabling greater headroom for scaling

AMD TECHNOLOGY AT A GLANCE

3rd Gen AMD EPYC™ CPUs

TECHNOLOGY PARTNER

aws

Engaging online and face-to-face multimedia content requires high-performance, cost-effective, and flexible infrastructure. India's leading media organization in this area, 9.9 Group, has been delivering innovation using Amazon Web Services since 2011. The company serves over 20 web applications to more than 20 million users each month. A switch to a closer regional AWS data center enabled an upgrade to instances powered by AMD EPYC™ processors, providing huge savings for 9.9 Group and the performance headroom to host exciting new services.

Serving multimedia content to fluctuating audiences

"The 9.9 Group has diverse traditional and new media businesses spanning print, online, research, conferences and events," says Dhiraj Srivastav, General Manager & Head IT, 9.9 Group. "We focus on specialty media with prominent brands. We have multiple media-related applications delivering text, images, and video content to our readers, who are mostly tech-focused. But our technology publishing websites have consistently experienced fluctuations in user engagement."

"Their [AMD EPYC CPU-powered AWS instances] superior performance, scalability, reduced latency, and cost optimization make them an ideal choice for any workload."

Dhiraj Srivastav, General Manager & Head IT, 9.9 Group

The primary challenge for 9.9 Group is managing this varying demand while staying within allocated budgets. "This revolves around addressing the workloads that require specific memory optimization and computational power, alongside the ability to handle spiky demand effectively," says Srivastav. "The combination of requirements for this is a significant challenge while maintaining cost-effectiveness." To achieve this balance, 9.9 Group needed a scalable solution that could improve website user performance and lower latency at a reduced price.

For over a decade, 9.9 Group has been working with AWS to provide the necessary flexibility. "We started with the Singapore region on C3 instances that weren't powered by AMD CPUs," says Srivastav. "Six months ago, we moved all our infrastructure to Mumbai-based AWS instances. Our long-standing partnership with AWS has provided valuable insight into the latest services and machines introduced by the platform. When we were moving to Mumbai, AWS suggested we try the AMD EPYC processors."

Srivastav was already familiar with the potential of AMD CPUs. "Being a tech publisher, we must stay connected with innovations within the industry to ensure we deliver relevant and cutting-edge content to our readers," he says. "We are always testing the latest gadgets and technology, so we knew about AMD in the gaming and laptop markets. But AWS introduced us to the availability of AMD CPU-powered cloud instances in the Mumbai region."

The 9.9 Group decided to test out the new instances. "We performed some Proof of Concepts (PoCs) with our current applications and some AWS services like OpenSearch, RDBMS, and Aurora," says Srivastav. "We tried with both competitor-based machines and machines powered by AMD. We found that AMD CPU-powered instances were very scalable." The Mumbai region was also offering significant discounts on AMD EPYC processor-powered AWS instances. "We tried C6a, M6a, and R6a instances and found significant performance benefits as well as cost optimization."

Cost reduction enables scalability

"After the PoCs we deployed our major workloads on M6a and R6a machines," says Srivastav. Of the company's current deployment of 30 instances, 25 now run on AMD processors. "The pilot deliverables of Amazon instances powered by AMD EPYC processors provided us with more alternatives for scaling in the future while still achieving technical and performance criteria."

There was a measurable improvement in performance, with room for growth. "Our ability to scale more easily with AMD EPYC processors resulted from the immediate reduction of 35 percent cost that could go up to 45 percent after optimization," says Srivastav. "Switching from the Singapore data center region to Mumbai also greatly reduced our latency. It has given us scalability freedom. With previous machines, whenever we tried an experiment, we had to pay too much. Because of the significant cost reduction, our technology department has the freedom to use AMD processor-powered instances to run multiple PoCs based on our future applications."

"When we deployed this API on the AMD processors with AWS, we found that we reduced our latency by 45 percent."

DhiraJ Srivastav, General Manager & Head IT, 9.9 Group

"The combination of AWS and AMD allows us to provide more features at a reduced cost while maintaining a similar level of performance," says Srivastav. "Migration was very smooth. We didn't face any challenges moving from our previous processors to AMD processors. We can spend the money we saved on deploying new applications and enhancing our infrastructure. The main benefit of the AWS instances powered by AMD processors is the performance. We found that we reduced latency significantly." This had a knock-on effect on cost, because 9.9 Group could reduce its provision for the same performance.

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"In OpenSearch we have multiple data index buckets and from those we are processing lots of information and making a final endpoint API," says Srivastav. "That API was struggling with our older infrastructure setup to reduce server response time. But when we deployed this API on the AMD processors with AWS, we found that we reduced our latency by 45 percent."

Towards an all-AMD infrastructure

"Right now, we still have around 20 percent of our instances running on other processors because they are currently reserved instances with a discount, but we are trying to shift that onto AMD processors," says Srivastav. "We also have three new applications coming for a new community that is based on our influencer and college-based users. We will be deploying AMD processors for those applications as well."

"I highly recommended AMD EPYC processor-powered AWS instances to my colleagues in other organizations," says Srivastav. "These instances represent the future of workloads due to their exceptional performance, scalability, and cost optimizations. AMD EPYC CPU-powered AWS instances offer a compelling provision for organizations across all industries. Their superior performance, scalability, reduced latency, and cost optimization make them an ideal choice for any workload. By leveraging these instances, organizations can unlock new levels of efficiency, performance, and cost effectiveness."

"We are currently running 80 percent of our workloads on AMD EPYC processors and are very pleased with the performance," says Srivastav. "We anticipate moving the remaining 20 percent of our workloads to AMD very soon. The three new applications we are going to deploy will easily add at least 15 to 20 instances, which will take us to a total of 50 or more. They will all be powered by AMD EPYC processors."

About 9.9 Group

Headquartered in Delhi National Capital Region, 9.9 Group is India's leading media organization that serves the B2B and B2C technology communities through cutting-edge content and innovative engagement formats. The company has a diverse set of traditional and new media businesses, spanning print, online, research, conferences, and events. It focuses on niche and specialty media with prominent brands. For more information visit www.9dot9.in.

About Amazon Web Services

Amazon Web Services began offering cloud computing IT infrastructure services in 2006, enabling businesses to replace up-front capital infrastructure expenses with low variable costs that scale with their business. Today, Amazon Web Services provides a highly reliable, scalable, low-cost infrastructure platform in the cloud that powers hundreds of thousands of businesses in 190 countries around the world. The company had $62 billion in revenue in 2021, with over 40,000 employees and over a million users worldwide. For more information visit aws.amazon.com.

About AMD

For more than 50 years AMD has driven innovation in high-performance computing, graphics, and visualization technologies. Billions of people, leading Fortune 500 businesses, and cutting-edge scientific research institutions around the world rely on AMD technology daily to improve how they live, work and play. AMD employees are focused on building leadership high-performance and adaptive products that push the boundaries of what is possible. For more information about how AMD is enabling today and inspiring tomorrow, visit the AMD (NASDAQ: AMD) website, blog, LinkedIn, and Twitter pages.

All performance and cost savings claims are provided by 9.9 Group and have not been independently verified by AMD. Performance and cost benefits are impacted by a variety of variables. Results herein are specific to 9.9 Group and may not be typical. GD-181