

Driving business value from GenAI

Overcome complexity, risk, and expense to increase ROI and deliver on AI expectations



Dell PowerEdge XE9680

AMD Instinct™ MI300X

Case Study Profile Healthcare

Industry challenge

Healthcare faces high demand, long wait times, and heavy administrative burdens, limiting care quality. Innovative solutions are urgently needed to streamline workflows, enhance diagnostics, and improve patient outcomes effectively.



Solution Architecture

Multimodal AI improves healthcare service quality and patient outcomes



Accurate diagnostics

Vision-language models analyze medical imagery precisely and efficiently, speeding up accurate diagnoses and improving patient outcomes



Efficient care coordination

Retrieval-augmented generation (RAG) streamlines patient summaries, giving healthcare professionals quick, relevant insights for timely and informed decisions



Seamless documentation

Audio session transcription automates real-time clinical notes, freeing providers to focus on patients and ensuring up-to-date, accurate healthcare records

Dell AI Factory results

Dell Technologies and AMD help organizations achieve:

Up to
75%
Reduced costs¹

Compared to public cloud while maintaining high-quality performance and data privacy

Up to
86%
Faster adoption²

Reduce implementation time by up to 86%

Scalable networking

Enhanced scalability supports higher workloads efficiently

Validated configurations

Pre-tested setups simplify deployment and optimize performance

Simple AI integration

Streamlined solutions ease AI adoption for enterprises

Greater efficiency

Streamlined workflows and reduced administrative burdens enhance efficiency and patient care

Dell Technologies offers complete generative AI services—strategy, implementation, scaling, and management—empowering businesses with expert solutions for AI success.

Turn GenAI POC into ROI with **Dell Technologies** and **AMD**

[Dive deeper into this case study](#)

¹Based on Enterprise Strategy Group research commissioned by Dell, comparing on-premises Dell infrastructure versus native public cloud infrastructure as a service, April 2024. Analyzed models show a 7B parameter LLM leveraging RAG for an organization of 5k users being up to 38% more cost effective while a 70B parameter LLM leveraging RAG for an organization of 50k users being up to 75% more cost effective. Actual results may vary. [Economic Summary](#)

²Estimate based on Dell analysis in May 2024 comparing time to setup a 2-node Kubernetes cluster for a general-purpose LLM using automated scripts vs deploying a common design manually. Setup time includes base installation only. Actual setup time will vary depending on solution configuration.

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