

CitiusTech helps an imaging leader transform to an Al-based, cloud-native PACS SaaS solution, cutting capital expenditure for Providers and diagnostic centers

Our client, a prominent provider of medical imaging storage solutions, faced challenges with their on-premise PACS system, leading to additional operational costs, operational inefficiencies, and downtime.

They trusted CitiusTech to reimagine their PACS system, transitioning it to a cloud-based SaaS platform that integrates seamlessly with their Al-enabled ecosystem. The modernized solution resulted in a substantially faster workflow, higher diagnostic accuracy, and significant reductions in operating costs for healthcare providers, ultimately offering quicker, more precise diagnostics and, overall, better patient care.



BUSINESS CHALLENGE

Escalating operational costs and inefficiencies of the on-prem PACS

Our client is a leading imaging storage solution provider in the market. Their Picture Archiving and Communication System (PACS) was one of the most advanced in the market and provided highly reliable image storage for providers, radiology, and diagnostics groups. However, they identified gaps in how they operated the enterprise imaging solution, especially with the rapid evolution of technology and change in customer preferences. Their solution was hosted on-premise, which meant the providers and radiology groups had additional operational and capital costs for hosting.

It also meant that every configuration and integration had to be custom-built. Adding to this inefficiency was the downtime

during configurations and upgrades.

The path forward was clear: evolve with the market and modernize their on-prem solution to transition to the cloud. The steps, however, are not as straightforward. With providers and radiology groups heavily relying on the platform, it was important to ensure there was no disruption to the current operations.

THE **SOLUTION**

Seamless transition to a cloud-based, scalable, Al-integrated PACS SaaS solution

The client partnered with CitiusTech to achieve their cloudnative solution. CitiusTech, with over 18 years of expertise in such modernization projects, charted a clear strategy centered on scalability, seamless integration with their existing Al-powered platform ecosystem, and robust data management.

The client chose AWS as the hosting platform for the PACS. The team then established a pipeline to directly route medical images to the cloud from disparate imaging sources – CT, MRI, PET, Ultrasound, and several other modalities. The solution is designed to be a multitenant platform with efficient management and accessibility to diverse medical imaging data.

To mitigate the risk of data loss and system downtime, CitiusTech implemented a strong backup and disaster recovery plan - setting up multiple backup zones on AWS's Availability Zones (AZ). These



zones create redundancy and high availability, ensuring that the system is resilient to any potential disruptions.

As an on-cloud solution, scalability is built into the design, making it more cost-efficient for healthcare providers who frequently experience varying levels of demand and imaging data flow. Instead of a fixed capital cost, they can now choose a plan which can be customized to their specific needs.

The data migration process also required careful consideration. CitiusTech moved the existing data from SQL Server to AWS RDS, a more efficient, cloud-based storage solution. With this move, CitiusTech helped the client minimize operational costs and eliminate downtime during migration.

BENEFITS DELIVERED

Faster workflows, improved diagnostic precision, and significant cost reductions

This project was a significant turning point for the client, and the program execution by CitiusTech brought significant improvements to the solution – workflow efficiency, diagnostic precision, cost reduction, flexibility, and simplified operations.



Significant boost in workflow efficiency, speeding up medical image processing and report generation.



Substantial improvement in diagnostic precision, enhancing the quality of patient diagnoses and care.



Cost reduction in both immediate operational costs and long-term ownership expenses.



Flexible service plans – tiered, affordable plans – making the technology accessible to a broader range of providers.



Faster report turnaround, contributing to quicker patient diagnoses and treatment initiation.



Simplified system maintenance and management



Support for multiple systems with various viewers and third-party applications, supporting diverse healthcare needs.



Shaping Healthcare Possibilities

CitiusTech is a global IT services, consulting, and business solutions enterprise 100% focused on the healthcare and life sciences industry. We enable 140+ enterprises to build a human-first ecosystem that is efficient, effective, and equitable with deep domain expertise and next-gen technology.

With over 8,500 healthcare technology professionals worldwide, CitiusTech powers healthcare digital innovation, business transformation and industry-wide convergence through next-generation technologies, solutions, and products.

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