

Case Study: Healthcare

Innovative healthcare analytics company enables remote productivity with cloud solutions

Healthcare analytics leader collaborates with Cognizant experts to deploy a secure, cost-effective cloud infrastructure that supports its rapidly growing remote workforce.

An innovative leader in healthcare analytics, this company focuses on improving care delivery through the development of advanced clinical, analytical and technical solutions. Its team of physicians, nurses, technologists, analytics experts and business professionals has created a suite of solutions that assist health plan providers, hospitals and employers. The company's goal is to provide the technology, training, data and insights needed to support personalized, patient-centered care and improved health outcomes.

Scaling quickly, securely and cost effectively

With an initial remote workforce of approximately 100, the company quickly needed to scale up to handle 2,000 or more remote workers. It was already somewhat familiar with the AWS Cloud and currently using it as a development platform to build new applications.

At a glance

A leading healthcare analytics and technology company needed to support more than 2,000 remote users and enable continuing growth. It wanted a highly scalable, secure solution with the flexibility of a pay-per-use model.

Cognizant helped the company scale up its remote working capacity at a significantly lower cost by providing a completely managed, highly available and secure desktop-as-a-service (DaaS) solution based on AWS Cloud and Amazon WorkSpaces.

Outcomes

- Reduced total cost of ownership (TCO) by approximately 30% in just six months.

Due to industry economic pressures, the company also needed to minimize capital expenditures and reduce ongoing operational costs. In addition, it needed to meet rigorous industry security and privacy regulations for health-related data. The existing on-premises infrastructure didn't have the flexibility to scale quickly and easily, and it couldn't onboard new users within an acceptable timeframe.

The company looked to Cognizant for guidance in finding a highly secure infrastructure that could support more than 2,000 user desktops and 250 applications cost effectively in less than six months.

Leveraging the power of AWS Cloud and Amazon WorkSpaces

After a thorough evaluation of the client's needs and an assessment of its existing infrastructure, Cognizant proposed a solution built on the AWS Cloud and Amazon WorkSpaces. Through Amazon WorkSpaces, Cognizant provided a managed, highly secure DaaS solution. All workspaces are hosted on a public cloud, with access limited only to client devices. The company can provide workspaces to its end users anywhere, at any time and on any desktop—with automated and self-service provisioning.

Amazon WorkSpaces quickly proved to be the ideal answer to the company's need for both on-demand scalability and reduced operational costs. Remote desktops can be set up for thousands of users, and the company pays monthly or hourly and only for the workspaces it launches. The solution helps eliminate the complexity in managing hardware inventory, OS versions and patches, and virtual desktop infrastructure.

- Achieved up to 30% faster connectivity to the corporate network.
- Created a better user experience with a dedicated remote environment for users.
- Enabled workspace computing/storage power upgrades in 10 to 15 minutes.
- Improved security and built a highly available and scalable environment.

In addition, the cloud infrastructure satisfies another of the company's key requirements: providing extensive security and business continuity functions to safeguard its data. The AWS Cloud security and authentication features enable the company to manage identities, resources and permissions at scale. Administrators can securely and easily manage remote user access to all workloads and applications.

Before deploying the Amazon WorkSpaces environment, the company used a Citrix solution for virtualization and management. Cognizant easily integrated this solution into the AWS infrastructure so the company could continue to use certain features on which it relied.

Pleased with the performance of Amazon WorkSpaces, the company later added Amazon AppStream 2.0, a fully managed application streaming service that enables IT administrators to centrally manage desktop applications and securely deliver them to any computer. AppStream 2.0 is built on AWS and designed for the most security-sensitive organizations. Users gain a fluid and responsive experience with all applications, including GPU-intensive 3D design and engineering.

Achieving better outcomes with Cognizant's collaborative approach

Cognizant worked with the company to develop a clear IT and cloud migration strategy that was closely aligned with the organization's overall business goals. Strategic work included creating an IT operating model, evaluating cloud platforms and tools, reviewing third-party best-in-class products and developing a proof of concept. Cognizant carefully evaluated key criteria, such as the precise capabilities of different products to meet not only the client's functional needs but also the healthcare industry's extensive regulatory and compliance requirements.

Developing a solid proof of concept was an essential step. The client was concerned about security and authentication in the cloud. After Cognizant demonstrated the extensive capabilities of the AWS Cloud platform—and how it specifically works well for healthcare organizations—any questions were put to rest.

Cognizant identified migration challenges and a risk mitigation approach, designed and provisioned Amazon WorkSpaces infrastructure solutions, and enabled the client to provision workspaces in bulk and manage images for different teams of users. A dedicated Cognizant client team was assigned and continues to provide the company with ongoing operational support.

Building a robust and agile infrastructure for remote work

The client's cloud infrastructure powers provisioning and virtual workstations, enabling developers and data scientists to quickly deploy resources and work from any location. This capability shortens time to market for new applications and analytics features, strengthening the company's position in a highly competitive industry.

Key benefits

- Highly available, reliable and secure HIPAA-compliant environment.
- Capability to rapidly scale up and add users as needs change.
- Significant reduction in infrastructure expenditures and ongoing operational costs.
- Pay-per-use model with no upfront costs.
- Faster time to market enabled by agile and rapid cloud development environment.

Taking its entire infrastructure to the cloud has saved the company considerable upfront and ongoing operating costs. Cognizant tapped its economies of scale to integrate leading third-party security offerings into the client's infrastructure cost effectively. The company now has the availability it requires to develop new features to support its members, as well as the assurance that its security and compliance requirements are met.

Looking ahead

No one could have anticipated the severe, and lasting, effects of the COVID-19 pandemic. But—fortunately—with an AWS Cloud and Amazon WorkSpaces environment already in place, this healthcare company is well-equipped to accommodate a rapidly growing base of remote employees. While other businesses struggle to ramp up support quickly for a now largely remote workforce, this company is capable of confidently meeting its changing business demands.

Cognizant continues to work closely with the company to both enhance its remote productivity infrastructure and provide ongoing services and support.

About Cognizant Healthcare

Cognizant's Healthcare Business Unit works with healthcare organizations to provide collaborative, innovative solutions that address the industry's most pressing IT and business challenges—from rethinking new business models, to optimizing operations and enabling technology innovation. A global leader in healthcare, our industry-specific services and solutions support leading payers, providers and pharmacy benefit managers worldwide. For more information, visit www.cognizant.com/healthcare.

About Cognizant

Cognizant (Nasdaq-100: CTSI) is one of the world's leading professional services companies, transforming clients' business, operating and technology models for the digital era. Our unique industry-based, consultative approach helps clients envision, build and run more innovative and efficient businesses. Headquartered in the U.S., Cognizant is ranked 194 on the Fortune 500 and is consistently listed among the most admired companies in the world. Learn how Cognizant helps clients lead with digital at www.cognizant.com or follow us [@Cognizant](https://twitter.com/Cognizant).



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