

## Case Study

# Application Managed Services Enable a Health System to Improve Website Performance, Minimize Operational Expenses, and Drive Long-term Stability and Growth



## Customer Overview

### Customer:

A not-for-profit health system dedicated to caring for people

### Profile:

The health system advances the practice of medicine through education, innovation, and research via 30,000 associates, 6,000 affiliated physicians, 10 hospitals, ambulatory care, and urgent care centers.

### Industry:

Healthcare

### Services:

Application Managed Services

## Business Need

The health system had 3 websites that were developed by a different partner to deliver the ideal experience for patients, caregivers, students, and healthcare professionals. But as the business grew, multiple issues were identified across the existing infrastructure, including the need for improved tools and search, poor performance vis-à-vis competitor websites, internal stakeholder issues across, and lack of proper communication, among others.

The not-for-profit health system was also facing many challenges related to its website, management of complex data, third-party applications, etc., including:

- The presence of a bunch of legacy cardiology imaging archives stored on NAS drives which had no clinical need and carried a massive cost to import into regular archives.
- The inability to manage the external member portal setup utilizing Azure AD B2C and support the platform in case of issues.
- An ineffective approach to ingesting data from Cerner health on an ongoing basis for various downline analysis and reporting which led to the need for exporting ~10TB of data to a secure Microsoft Data Box and shipping it to Azure.
- Unoptimized ETL pipelines due to the distributed client base and complex set of data.

The health system, therefore, sought a competent and experienced partner who could provide a plan and a solution that is designed to enable their objectives for the assessment. Since they were actively working with Microsoft and other partners to build out the Sitecore platform in the Microsoft Cloud, they wanted an MSP who could support and manage their Sitecore website and other third-party applications that were integrated with it.

Given all these requirements and Synoptek's expertise, the health system requested Synoptek to resolve emerging issues while improving discoverability, reducing friction, and enabling action. It also wanted Synoptek to offer Application Management Services (AMS) to bring the 3 existing websites into a single domain and streamline and standardize user experiences.

## Solution and Approach

Synoptek's engagement with the health system began with a 3-month discovery phase. We worked with the Sitecore implementation partner for knowledge transfer, and environment setup, and to get a detailed understanding of the system. We also thoroughly went through the search fundamentals and logic which were the lifeline of the site. It is during this phase that we proved our capabilities as the ideal partner to work on the support project.

Post discovery, we conducted detailed research to support the Sitecore Experience Platform, craft a content strategy, and curate a migration plan to support the required functionality.

We provided subject matter expertise of the Sitecore platform, state-of-the-art software engineering practices and standards, dependable delivery, and business models, as well as dedicated resources, program management, and expert Azure support to manage and upgrade the existing Sitecore platform.

We also delivered a range of Application Management Services across technology consulting, website support and maintenance, and infrastructure management services, including:

### Backup Services

- Set up Azure backup for Azure SQL as well as a DR setup for the Sitecore Prod environment.
- Set up a disaster recovery plan with an RTO of 2-4 hours, and an RPO of 24 hours with hot-warm recovery where data is synchronized to the secondary region with native sync features/third-party tools.
- Enabled AKS cluster version upgrade and worked on Azure AzCopy command to copy huge numbers of data from file share to archive storage account.
- Spun up whole new infrastructure for new applications and configured active geo-replication to withstand regional data center failure.
- Enabled app service cloning and worked on database requests for different kinds of configurations and access.

## Maintenance and Support Services

- Set up the basic monitoring to support the existing team as and when they install and configure application components and carry out data migration.
- Built and added an MD Search Functionality icon and search bar to allow users to find a provider.
- Provided proactive and reactive support for the Azure environment including auditing of accounts, technical advice, credentials management, cost auditing, application administration, and website optimization.
- Enabled application insights monitoring on ASP.NET for Azure App Services hosted applications.
- Regularly worked on resource creation like VM, storage account, AKS cluster, data bricks, data factories, etc. as required by the customer.
- Configured application insights for different services like web apps, container instances, etc.

## Security Services

- Implemented advanced data security, vulnerability assessment, and threat protection on SQL servers.
- Conducted security operations monitoring around the new Azure environment.
- Implemented server security patches, and server-side software updates, and enabled IDS alert and log monitoring.
- Developed and configured a vulnerability management solution for Sitecore components.
- Monitored the public website for threats along with effective incident response, issue remediation, root cause analysis, and log and data collection.

## Testimonials



I want to extend my appreciation for the awesome work the Synoptek team did in setting up the AZ copy. Not only were they informative, but also very patient. The amount of time we can save due to this is still unimaginable to me. I'm so grateful to have their support.

– Sr. IT Analyst

## Business Benefits

Synoptek's range of Application Management Services, 24/7 support, and subject matter expertise has enabled the health system to:

- Get detailed insights into how it can improve the current environment and architect it for longer-term stability and growth.
- Enable ongoing management of the Sitecore website to detect and resolve issues in time – without impacting user experience.
- Get around-the-clock support for all time zones to identify performance bottlenecks and minimize downtime.
- Ensure timely and dependable releases of upgrades, patches, and bug fixes, and enable effective security review and compliance.
- Improve performance tuning and stability via preventive and proactive 24/7, SLA-driven software maintenance.
- Save on storage expenses by moving to the Azure cloud and increase sustainability.
- Provide reliable member portal experiences via ongoing management and periodic feature enhancements.
- Make necessary changes to the pipelines leading to easier management and better customer experience.

## About Synoptek

Synoptek delivers accelerated business results through advisory-led, transformative full-life-cycle systems integration and managed services. We partner with organizations worldwide to help them navigate the ever-changing business and technology landscape, build solid foundations for their business, and achieve their business goals.