

# Customer Case Study



An innovative leader in the aluminum industry with a global headquarters in Pittsburgh, PA.

Applied Cloud Systems relationship with a leading Aluminum manufacturing company began with a modernizing of their website which was built using legacy technologies that were difficult to support with a modern team and their internal skill set.

In order to modernize their website for supportability and maintainability, they understood the need to migrate to a modern platform. Along with their legacy technology, the site was also hosted on customer owned and maintained data centers, creating on-going support costs and overhead.

ACS proposed modernizing our customers website by migrating the application code from Legacy Active Server Pages 3.0 (ASP) to the latest .NET Core Razor Pages. Also, by hosting the website in Microsoft Azure App Services, the customer was able to achieve all the benefits of an a fully managed web hosting service.

At the conclusion of this first engagement, the customer saw a decrease in cost and maintenance overhead. This closely aligns with customer skill set, implementation of a robust CI/CD, comprehensive App Monitoring solution.

ACS has engaged in several additional projects and continues to be their go-to partner for technology advancements.

**Security Framework:** Customer security requirements included maintaining Internet access to their development and testing copies of the site while securing them to only their employees. In addition a secured area for certain administrative functionality limited to only members of one Azure AD Group.

**App Monitoring:** The customer, with the direct assistance of Applied Cloud Systems, implemented several enterprise-level API Management instances and a robust Automation System for governing and processing requests for the large-scale, internal creation of APIs. This implementation of Azure API Management transitioned the company away from on-premise API development into cloud-based API management.

**DevOps:** ACS implemented a DevOps branching architecture to ensure that new features and file updates could be isolated, reviewed and ultimately approved to be promoted to a production environment.

**Core Programming Skills:** Customer sought Applied Cloud Systems to troubleshoot/debug, and refactoring ASP.NET 3.0 code used for the modernization of the company website. The objective was to take the former website writing in ASP code and transform into the new site that leveraged ASP.NET 3.0 and Razor pages.

# Customer Case Study



A Cardiac Management Solutions organization which provides products that protect and manage cardiac patients, based in Pittsburgh PA.

A leading medical device company developed a heart monitoring wearable device, which was involved in an FDA case study. This device gathered information from patients worldwide and entered it into a centralized database. Once the information was conveyed to the team of clinicians, they generated individualized reports that did not comply to any standards within the organization, making sharing results difficult. In addition to reporting inconsistencies, the clinical team was also not notified when the subject's medical readings fell above or below the acceptable threshold.

Applied Cloud created an App Service website which presented clinicians trial participant specific data. On-premises data was migrated and massaged into an Azure SQL Database which served as the data repository for the website interface.

An email alerting system was put into place to notify staff if a patient's medical readings were approaching unacceptable levels. ACS was able to provide them the ability to gather the necessary data to further improve upon their device which in turn provide patients with better care and a better quality of life.

The system ASC created for the customer allows for versatility in other areas of their medical device development, creating a repeatable solution that can be used across many other medical trials.

They continue to engage Applied Cloud in their technology efforts.

**Security Framework:** SSL over HTTPS with single user accounts for the AppService. The App Service was further secured by Azure VNet, Firewall and Active Directory rules.

**App Monitoring:** Application Insights was used to monitor the AppService by the client.

**DevOps:** Dev Ops was used throughout the Development process and maintained by the client.

**Core Programming Skills:** C#, ASP.Net, Javascript, tSQL