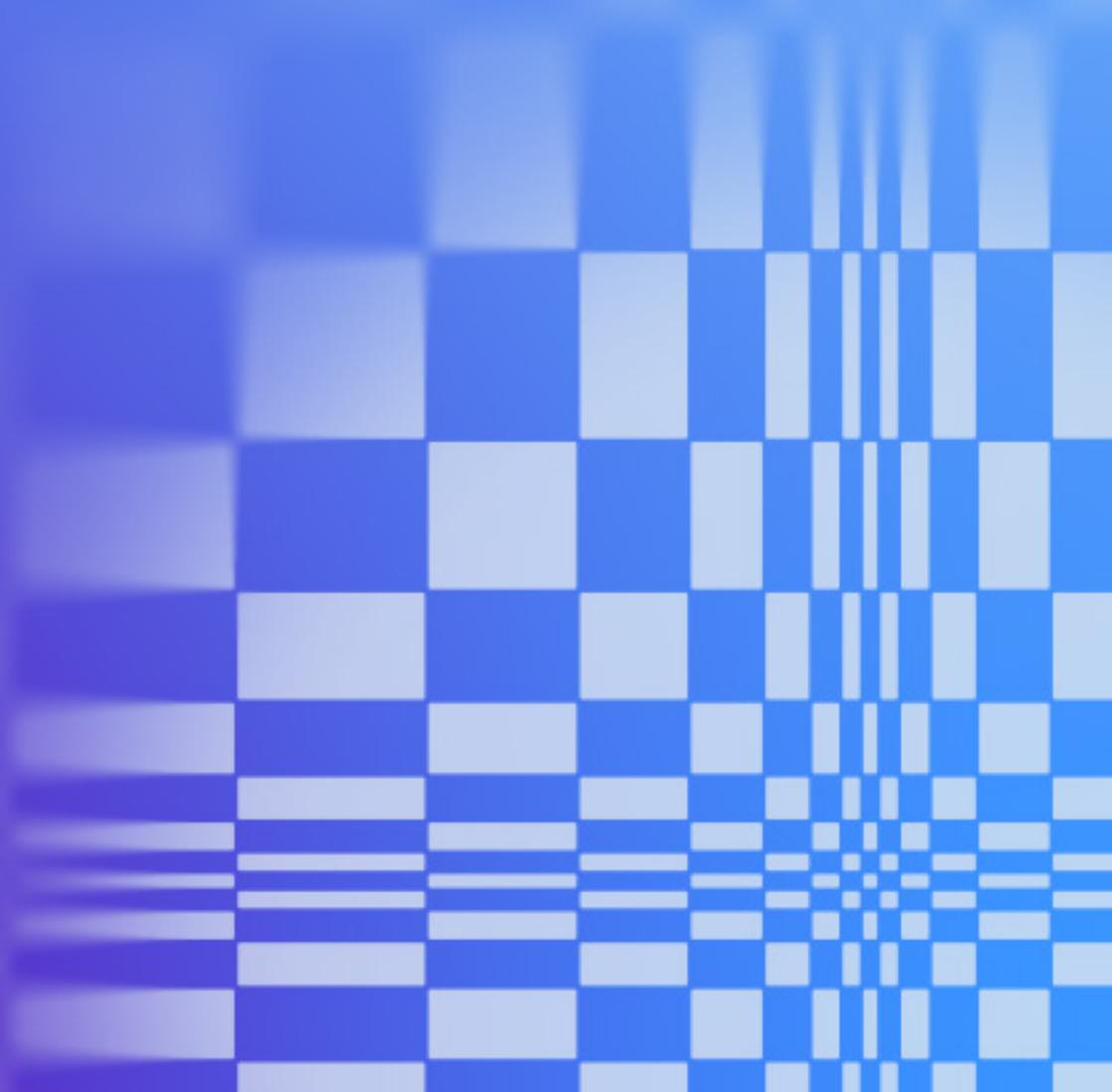


**Powering cloud-native
digitization** to help a
leading medical devices
manufacturer transform



In an increasingly competitive landscape, a U.S.-based medical technology company, with over \$4 billion in revenue and over 10,000 employees required a medical data platform to facilitate the rapid build, test and release of products and services. The company turned to HCLTech who, after a consultative process, created a digital transformation strategy that centered on the development of a cloud-native platform. HCLTech was responsible for the end-to-end delivery of this platform and built the microservices architecture. This collaborative partnership helped the medical technology company accelerate its digital transformation ambitions, overcome the challenges of cultural change management and take advantage of the tangible benefits described below.

The Challenge:

Keeping pace with new competitors

Digital-native competitors are disrupting the medical sector, pushing traditional medical technology companies to embrace digitization and accelerate their digital transformation journeys. To remain competitive while adhering to stringent regulatory compliances, medical technology companies must adopt new technologies and overcome the hurdles of cultural change management. What appeared to be an expensive and time-consuming process, HCLTech addressed with a cloud solution approach.

The Objective:

A medical data platform to accelerate product and service deployments

To keep pace with the competition, the medical technology company required a medical data platform that would facilitate the rapid build, test and release of products and services. The objective was to create an organization that embraced working in an agile, DevOps and cloud-native environment. The client was looking for a trusted digital transformation partner who had the expertise to build the desired platform and work collaboratively with them to address future digital transformation requirements.

The Solution:

A cloud-native approach to digital transformation

HCLTech employed its specialized Digital Engineering practice to bring multiple tested frameworks and solution accelerators to support the client's digital transformation journey. HCLTech began with a consulting phase to assess the requirements and understand the long-term goals and the vision of business teams to create a digital transformation strategy. Based on this assessment, HCLTech recommended a cloud-native approach to develop the medical data platform and build the microservices architecture that supported it. The microservices were deployed in containers that would run on Kubernetes and be hosted on the Microsoft Azure cloud. HCLTech was responsible for the end-to-end delivery of this platform. In addition to consulting and architectural design, the partnership also included activities such as collaboration with third-party vendors, tool stack identification and recommendation, assessment and selection of the right hosting platform.

The Impact:

Significant reduction in management complexity and cloud costs

The development of this platform was accelerated by several HCLTech solutions. The CARE platform, for example, ensured the rapid development of microservices with many pre-built functionalities for medical software, while RAPID enabled the faster provisioning of host environments and the deployment of Continuous Integration-Continuous Deployment (CI-CD) pipelines.

HCLTech's solutions and their seamless delivery ensured that 10 repositories, 60+ microservices, secured key vaults, 40-60+ build/release pipelines and five builds per micro service were built per day during the development of the platform.

This acceleration of the medical data platform's development led to tangible benefits being delivered at a rapid pace for the customer. These included a reduction in Kubernetes management efforts by 40%, a reduction in cloud infrastructure costs by \$2,500 per month and an increase in helm charts deployment by 2X.

The development of this platform was accelerated by:

- HCLTech's solutions such as the CARE platform for rapid development of micro services and RAPID for faster provisioning of hosting environments
- The orchestration of Microsoft Azure Kubernetes service and iCOSMOS to monitor micro services
- Leveraging the CARE platform to provide many pre-built functionalities for medical software
- HCLTech frameworks like RAPID, deployed to set up the Continuous Integration - Continuous Deployment (CI-CD) pipelines
- Optimizing the Kubernetes clusters and auto-scaling properties to reduce infrastructure costs



- Enabling cloud automation using Jenkins, Terraform, ARM and Ansible
- Introducing helm charts to manage the Kubernetes application

Benefits Delivered



10 repositories,
60+ microservices, secured key vaults,
40-60+ build/release pipelines and
5 builds per micro service per day

Helm charts increased
deployment rate to
2X

Reduced Kubernetes management
efforts by more than
40%

Reduced cloud infrastructure
cost of pre-prod environments by
\$2,500 per month