



# Revamping architecture and processes through Legacy to SaaS Migration

Leveraging advanced SaaS solutions to modernize clinical trials platform for evidence generation company



With solutions aiding hundreds of thousands of patients, this global evidence-generation enterprise works closely with hospitals and pharmaceutical companies across six continents. Committed to advancing deep therapeutic and scientific knowledge, they consistently capture and reveal quality evidence for clinical studies across traditional, virtual, and hybrid trial models.

In its ongoing pursuit to modernize clinical trials through strategic, cutting-edge software solutions, the company embarked on a quest to revamp its product portfolio while maintaining a robust market presence and effectively seizing opportunities.



# Streamlining Business Operations with an SSO SaaS Model

Central to this endeavor was aligning with the lucrative Software as a Service (SaaS) model, enriched with multi-tenancy capability. To streamline the user experience across all their products within a SaaS framework, the company aimed to integrate a Single Sign-On (SSO) solution, seeking predictable delivery, standardization, and improved cost-effectiveness.

Yet, with great objectives come great complexities. Users relied on the highly configurable clinical trial platform to forecast, plan, label, distribute, manage, and reconcile clinical supplies, all while maintaining real-time visibility. In response to growing customer demands, the organization urgently required an architectural revamp of its platform. The

mounting infrastructure expenses and the absence of an efficient customer onboarding process added further financial pressure.

Moreover, low automation coverage resulted in extended testing cycles and increased manual workload, with the existing monolithic architecture restricting swift release cycles and posing significant roadblocks for efficient transformation.

Given the critical nature of the business application, which handles clinical supply, distribution, and management, significant emphasis was placed on minimizing any potential process or operational downtime. It was imperative to ensure that the core business functions remained unaffected throughout the transition.

As part of the comprehensive SaaS migration strategy, prioritizing DevSecOps was essential to guaranteeing maximum security.

# Transforming Business Capabilities with Microservices and Modular Design

Building on its track record of successful delivery in prior projects, Brillio emerged as the ideal choice to lead the transition. The organization trusted Brillio as a one-stop partner for all their lines of products, aiming to maximize value by addressing both immediate needs and future objectives.

Brillio designed and implemented a holistic SaaS solution that seamlessly facilitated onboarding, operations, maintenance, and offboarding to the organization's platform.

Utilizing domain-driven design, Brillio defined Microservices that transformed business capabilities into services accessible to both internal and external stakeholders.

By adopting a modular design approach, all applications were engineered for effortless version deployment, upgrades, and releases. This isolated approach ensured minimal impact and risk to the overall architecture.

Furthermore, the team facilitated Single Sign-On (SSO) integration to enhance user experience, incorporating role-based authentication to guarantee appropriate access levels.

An automation-first strategy was adopted to maximize test automation, including automated test data setup, code quality checks, and alerts.

Brillio's  
Automation-first  
approach streamlined  
product releases,  
ensuring efficiency  
and reliability.

# DevSecOps and Business Expansion Integration

Through the implementation, a robust DevSecOps pipeline was established, guided by a "shift left" mindset to prioritize quality and efficiency throughout the delivery chain.

The overhauled platform could empower customers with plug-and-play options for easy scalability and setup. Additionally, application roll-outs were faster and more efficient, enhancing the overall user experience.

By enabling DevSecOps practices, platform quality, security, and efficiency experienced significant enhancements across the entire delivery chain, ensuring effective handling of critical functionalities such as supply, distribution, and management. Moreover, it streamlined scalability, allowing systems to seamlessly adapt to the evolving needs of business expansion.



## ABOUT BRILLIO

Brillio is one of the fastest growing digital technology service providers and the partner of choice for many Fortune 1000 companies seeking to turn disruption into a competitive advantage through innovative digital adoption. We help clients harness the transformative potential of the four superpowers of technology: cloud computing, Internet of Things (IoT), artificial intelligence (AI) and mobility. Born digital in 2014, we apply our expertise in customer experience solutions, data analytics and AI, digital infrastructure and security, and platform and product engineering to help clients quickly innovate for growth, create digital products, build service platforms, and drive smarter, data-driven performance. With 17 locations across the U.S., the UK, Romania, Canada, Mexico, and India, our growing global workforce of nearly 6,000 Brillians blends the latest technology and design thinking with digital fluency to solve complex business problems and drive competitive differentiation for our clients. Brillio has been certified by Great Place to Work since 2021.



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