



From Legacy to Leading Edge:

Sempra's Journey Through
Modernization and Infrastructure
Overhaul



Powering Progress with Application Modernization & Infrastructure Overhaul

With an extensive consumer base of nearly 40 million, total assets exceeding \$78 billion, and a workforce comprising 20,000 employees, Sempra stands as one of the leading energy companies in the United States and globally, securing a position among the prestigious Fortune 500 enterprises. Guided by an unwavering commitment to its clients, Sempra is dedicated to enhancing its electric and natural gas infrastructure. This commitment is evident in its ambitious initiative to modernize legacy applications specifically tailored for SoCalGas and SDG&E, two primary operating companies within its portfolio.

However, the outdated operating system,

coupled with unsupported software licenses, posed significant challenges for Sempra, hindering their capacity to update and maintain their infrastructure and resulting in an obsolete technology stack. The prevalence of legacy technologies such as ColdFusion and Lucee presented an additional hurdle, making it challenging to find individuals with the requisite skill sets to support these systems. Adding to the challenges were the imperative mainframe decommissioning, vulnerabilities related to cross-site scripting, dependencies on MS Office/Adobe versions, and the overhead associated with client installation & deployment. Consequently, the company experienced enterprise-wide infrastructure outages.

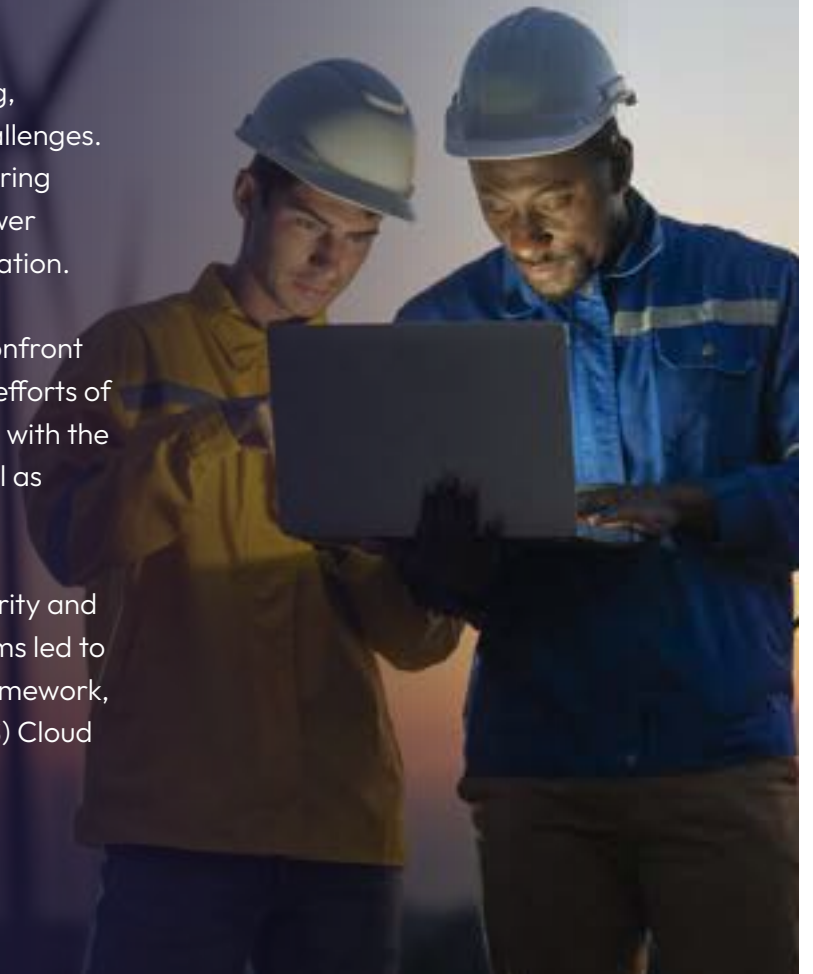
Sempra grappled with numerous cybersecurity vulnerabilities, including a susceptible database built on the outdated SQL 2005 technology.

Efficiency Optimized: Revolutionizing Cybersecurity, SAP Integration, and Cloud Synergy

Sempra sought a strategic partner to navigate the complexities of application refactoring, re-architecting, and seamless cloud migration while effectively addressing immediate challenges. With a comprehensive suite of digital solutions and a demonstrated track record of delivering tangible results in comparable endeavors, Brillio emerged as the optimal choice to empower Sempra's pivotal projects and initiatives, leading the charge in the overarching transformation.

To address systemic cybersecurity vulnerabilities within the application framework and confront the challenges of technological stagnation and accrued technical debt, the collaborative efforts of Brillio and the client teams initiated a transformative process. This endeavor commenced with the modernization of Single Sign-On (SSO), mobile capabilities, and the user interface, as well as optimizing integrations.

In alignment with the ongoing transformation, the teams jointly identified a range of security and technical enhancements essential for modernization. Subsequently, the efforts of the teams led to a holistic overhaul. This involved establishing a standardized application development framework, leveraging cutting-edge Agile tools, hosting applications on a Platform as a Service (PaaS) Cloud environment, and crafting APIs to seamlessly support all applications.



A Blueprint for Successful Transformation: Enhanced Security, Resilient and Scalable Architecture

In pursuit of enhanced security, modernizing the technology stack, and achieving overall efficiency gains, the teams undertook a multifaceted approach. The transformation involved implementing a resilient, scalable, and secure contemporary architecture. Simultaneously, the teams strategically executed application rationalization, targeting and eliminating duplicative technologies and skillsets. This comprehensive strategy not only facilitated a swift eradication of cybersecurity vulnerabilities but also contributed to increased business user satisfaction and productivity.

The engagement included a thorough 6R Framework assessment — encompassing Re-host, Re-platform, Repurchase, Retain, Retire, and Re-factor strategies — in addition to addressing product requirements and managing product backlogs. The partnership extended to overseeing production deployment and providing post-go-live support, ensuring a seamless and effective implementation of the transformation initiatives.

A strategic consolidation to SAP ERP & SAP PaaS Cloud and integration with AWS PaaS Cloud environment was undertaken to reduce TCO and streamline support costs.

Built to Last: Strategic Overhaul for UX Revolution, Cost Savings, and Efficiency Breakthroughs

The project delivered outstanding outcomes, achieving a significant efficiency boost by saving over 600 development hours. This was accomplished through the creation of a centralized API solution for frequently used common features and the development of a reusable Column Settings component. The deployment time for databases was dramatically reduced from 3-4 hours to a mere 30 minutes by implementing automated Database Projects. Furthermore, a total of 62 reusable UI components were crafted and made available across the entire company.

Noteworthy advancements were also witnessed in the User Experience, marked by heightened responsiveness in both the user interface and navigation. Significantly broader accessibility was achieved by migrating from legacy applications, which were previously confined to the Sempra network.

100% reduction in known vulnerabilities.

70+% unit test coverage.

25% reduction in development effort.

4x improvement in user experience.

30% operational maintenance cost reduction.



ABOUT BRILLIO

At Brillio, our customers are at the heart of everything we do. We were founded on the philosophy that to be great at something, you need to be unreasonably focused. That's why we are relentless about delivering the technology-enabled solutions our customers need to thrive in today's digital economy. Simply put, we help our customers accelerate what matters to their business by leveraging our expertise in agile engineering to bring human-centric products to market at warp speed. Born in the digital age, we embrace the four superpowers of technology, enabling our customers to not only improve their current performance but to rethink their business in entirely new ways. Headquartered in Silicon Valley, Brillio has exceptional employees worldwide and is trusted by hundreds of Fortune 2000 organizations across the globe.



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