

Powering Sleep Quality with Smart Bed Technology



How we introduced a brand new firmware design and adjustable climate feature for a major US bed retailer

Client Overview

Our client, a leading U.S. retailer in sleep innovation, revolutionized the sleep experience with smart bed technology. By tracking biometric data and offering adjustable temperature and mattress firmness, they enhanced comfort and health benefits. Their goal was to introduce a climate-adjustable smart bed, allowing individual preferences for temperature and firmness on each side.

Challenges

The client needed to launch this feature quickly to stay ahead of the competition. Time to market was critical, and the existing hardware wasn’t compatible with the new climate control technology. Klika’s team needed to develop new firmware that was scalable, cost-efficient, and could integrate seamlessly with their hardware, despite operating from different time zones.

Klika’s Solution

Klika designed a flexible firmware architecture that minimized resource usage while maximizing performance. We ran firmware development in parallel with the client’s hardware efforts by using hardware evaluation modules and simulation tools. Agile practices allowed us to respond quickly to changing requirements. Key innovations included:



Lightweight, scalable embedded software



Over-the-cloud firmware updates for easier feature additions



Automated testing to streamline development and reduce costs

Results

Klika has partnered with the client for over eight years, developing some of their most successful smart bed editions, now used by over 1 million customers. With a team of 70+ engineers dedicated to their smart bed technology, Klika continues to support their innovation in sleep quality.

Technology Stack



Kotlin



Swift



Angular



Node.js



FreeRTOS



C



C++



.NET



Azure



Databricks