

NATIONAL STORES CASE STUDY

National Stores Inc. is a family-owned retail chain headquartered in Los Angeles, California, with more than 360 locations in twenty-two states and Puerto Rico. They offer brand-name and private-label clothing, shoes, and household items.

THE BUSINESS CHALLENGE

To provide a welcoming and comfortable customer experience across National Stores businesses, heating and cooling units were constantly running, which meant that utility bills constituted a significant portion of each store's operating expenses.

Without an energy management system in place, all energy control was at the store level which meant store managers simply had to 'remember to check' daily that everything was turned off or set correctly before they closed up each night— an extra responsibility that was often forgotten.

Leaving HVAC systems running burned unnecessary cash and meant extra stress and maintenance on machinery, leading to system failures during hot summer days. What National Stores needed was some way of taking control of the HVAC systems in the stores and regulating them without having to rely on the memory and willingness of the store managers.

National Stores, like many other multi-site commercial businesses, had been deterred from adopting an energy management system as they believed them to be disruptive, costly, slow to show ROI and a huge undertaking from the point of view of the infrastructure required within the building.

With hundreds of locations across North America, National Stores needed:

- a means to move HVAC and lighting controls from the store level to a single portal to help monitor and control HVAC, lighting and energy consumption costs
- an energy management solution to significantly reduce energy usage and costs
- a solution that was not expensive to implement with a fast payback.

After doing an extensive market evaluation of available solutions, including evaluating energy brokers who work directly with suppliers to obtain the best deal on electricity and gas, National Stores selected Zen HQ.



Energy management systems always seemed like they weren't worth the hassle. Zen HQ impressed us with its fast deployment and real return on investment.

Installation has been a snap, and since it's so easy to use we're already making a big dent in our electricity bills. By keeping costs down, we can continue to pass great value along to our customers nationwide.

Jimmy Lee, Energy Manager, National Stores



THE ZEN HQ SOLUTION

As part of the nation-wide deployment across National Stores' locations, Zen HQ was installed in the company's corporate offices where more than 200 employees are located.

Zen HQ enabled National Stores to define schedules at a national, regional and site level to effectively manage HVAC usage and included lockout controls to prevent on-site deviations from schedules. Management could view heating, cooling, lighting and energy usage in dynamic visual graphs in Zen HQ to monitor usage and consumption more easily.

NATIONAL STORES SEES BENEFITS IMMEDIATELY

Zen installed two or three stores a day, per installer, with no interruption to National Stores business operations and no modifications to the building and existing wiring.

"We started seeing an immediate difference," said Lee. "We put about 20 thermostats in our corporate office building, which holds about 200 employees. We installed the system in August, so the first full month it was in use was September. I looked at the electricity usage bill from this September and compared it to September, which is in our hot time here in southern California, from prior years. We had a consistent record of paying an average of about \$10,000 a month every September; after we put the Zen system in, it was \$2500 lower. That's a 25% savings right off the top."

The additional cost savings component from the system is HVAC maintenance. "In a lot of the stores," Jimmy said, "the employees have been leaving the HVAC system to run all day, all night, and all week—that's including heat in the winter—which causes our HVAC systems to fail. This system prevents that, because we set the schedule. Here at headquarters we'll decide when it turns on and when it turns off. Having this kind of total control means first, we're saving in the electricity bill, and second, we're going to save on maintenance by not over-running our HVAC units."

Zen HQ's rollout to all 360 stores is on schedule and anticipated to be completed by early 2017.

National Stores & Zen HQ results

- Management now has control and greater insight into energy usage and costs
- Demand Response program participation has led to new revenue streams for the business
- ROI is anticipated in 6-12 months, compared to an industry average of 5 years

ENERGY BILLS DROPPED
BY MORE THAN

25%

COMPARED TO THE
PREVIOUS YEAR

Zen Ecosystems (Zen) provides intelligent energy management solutions to businesses and consumers. Zen HQ is an energy management system designed for the unique needs of businesses and utilities to provide insights and control over multisite commercial energy usage while delivering the fastest payback in the market. The Zen Thermostat is a beautiful, simple connected device for home and business that also enables multi system operators to enhance the customer experience.