



Stores of an athletic footwear brand get fit with AI & IoT

The retailer saved costs by adopting predictive maintenance of store equipment and increasing energy efficiency through optimized operations.

The Client

An American lifestyle and performance footwear company with more than 4,000 stores worldwide. It is one of the largest athletic footwear brands in the USA.

The Challenge

The retailer sought to leverage cutting-edge technologies such as the Internet of Things (IoT), and Artificial Intelligence (AI) to automate store operations, reduce energy consumption, and enhance adherence to enterprise-wide operating policies. Furthermore, they aimed to optimize the number of technician visits through remote commissioning, monitoring, and troubleshooting of Heating, Ventilation, and Air Conditioning (HVAC) equipment across their network of stores in the USA.

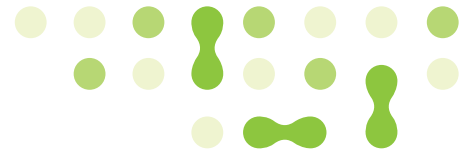
Their objectives included:

1. Enhancing occupant comfort through improved temperature compliance across all stores.
2. Improving energy efficiency of the stores through better Monitoring and Controlling of store equipment.
3. Optimizing store equipment operations and maintenance processes to minimize carbon emissions.

The Solution

The retailer partnered with EcoEnergy Insights for its expertise in achieving these objectives for multi-site organizations and is rolling out its AI-driven solution and remote service across 500 stores in the USA in a phased manner. EcoEnergy Insights deployed its Energy Efficiency and Energy Management System (EMS) services to drive operational transformation at the enterprise level. The integrated services combine the use of store energy data, equipment behavior analytics, and field service management to enhance savings.

After the initial study and analysis, the EcoEnergy Insights team arranged and installed the open protocol site hardware kit - which included Building Automation System (BAS) controllers,



room comfort controllers, sensors, and central supervisors – and then commissioned them in a timely manner. Thereafter, all the stores of the retailer were on-boarded onto the CORTIX™ AI platform, thus integrating all the HVAC units onto a digital platform.

The CORTIX platform facilitated the implementation of predictive maintenance for the stores' equipment, providing insights into enterprise-wide store operations. Centralized analytics and reporting through the CORTIX platform improved how the retailer could plan maintenance activities and minimize equipment downtime. The platform also identified malfunctioning and nonfunctional equipment, allowing for proactive resolution and, consequently, enhancing store uptime.

The retailer's teams and their vendor partners were supported by the BluEdge™ Command Centers. The centers are made up of specialized teams of domain experts and data scientists. They study the predictive insights from the platform to define action plans and ensure their completion on time. They work 24/7 to proactively manage equipment operations and maintenance as well as provide quick responses and remote support to store managers. The centers support the retailer's stores by handling store and technician calls, proactively acting on recommendations from the CORTIX platform, and monitoring equipment performance across the connected stores.

The model of engagement helped the retailer increase awareness among employees on energy conservation and made them more proactive in handling equipment operations.

The Result

The retailer was able to make store operations more proactive and achieve its objectives of improving temperature compliance, saving energy, and optimizing the equipment maintenance process.

Key Results for over 175 connected stores:

1. Over **19%** average energy savings from January 2019 to July 2023.
2. Over **76%** average remote resolutions of HVAC issues from January 2019 to July 2023.
3. Over **42%** reduction in the number of incidents per store per month in the period of January - July 2023, compared to the corresponding period in 2021.
4. An average service level of **92%** for calls addressed by the BluEdge Command Centers, with the average call abandonment rate of 0.8%, for the period January 2021 to July 2023.



Write to us at info.ecoenergy@carrier.com and elevate your business now.

About EcoEnergy Insights - EcoEnergy Insights is a leading provider of AI and IoT-enabled solutions to digitally transform building and equipment operations. Their CORTIX™ platform collects data from multiple sources, analyzes it, acts on defined deviations autonomously, and offers predictive actionable insights. The platform, combined with expert human analytics, has been delivering award-winning outcomes in comfort, maintenance, and energy efficiency across multiple industries such as retail, hospitality, and banking. EcoEnergy Insights is a part of Carrier Global Corporation, global leader in intelligent climate and energy solutions that matter for people and our planet for generations to come.

For more information on EcoEnergy Insights and the CORTIX™ platform, visit www.ecoenergyinsights.com and www.cortix.ai

