





Sapphire Foods leveraged a data-driven approach to manage their Pizza Hut restaurants

Transformed operations, enhanced customer experience and saved energy with a comprehensive program.

The Client

Sapphire Foods India Pvt. Ltd. (Sapphire Foods) operates over 400 restaurants, including Pizza Hut, across India, Sri Lanka and the Maldives. Pizza Hut is one of the world's leading restaurant chains with more than 18.000 restaurants in over 100 countries.

The Challenge

As an operator of Pizza Hut, Sapphire Foods consistently strives to deliver the experience promised by the brand. A significant portion of the company's operating expenses was their energy spend. The energy demand created through heating, cooling, and lighting along with utilities required to run the cooking equipment, contributes significantly to the cost of operating the restaurants. Sapphire Foods aimed to reduce their energy spend while maintaining excellence in food quality and enhancing customer satisfaction across their restaurant network. They believed that using a data-driven approach to manage equipment and operations could improve the restaurant network's energy efficiency and also help in achieving their other objectives.

The Solution

In 2017, Sapphire Foods engaged EcoEnergy Insights to benefit from our IoT, big data and cloud-based analytics-focused Connected Restaurant program. In the first phase, data was collected on equipment like HVAC, lighting, walk-in chillers (WIC), makelines and other infrastructure. The analysis of this data based on historical energy usage helped identify appropriate restaurant specific energy-saving strategies. The next phase saw the secure integration of the restaurant network with the CORTIX™ building IoT platform. The platform collected and analyzed the vast amount of data from each restaurant's equipment including sensors, controllers and energy meters. The platform used advanced analytical models and correlation logic to provide actionable insights on the restaurants' equipment performance. The insights drove continuous improvement in energy savings, food safety compliance, equipment performance, capacity planning and schedule optimization. To drive down energy costs, the CORTIX platform used the EcoEnergy Insights' patented Service Window® framework to help understand the correlation between energy consumption patterns and operation patterns across restaurants.



Additionally, the restaurant managers were preemptively supported by the Command Center - a team of domain experts and data scientists who collate, classify and interpret insights from the CORTIX platform to identify trends and requisite interventions, define action plans and ensure their completion in a timely manner. The Command Center acted as a one-stop support hub to the restaurant teams, ensuring that the information provided to the restaurant staff was easy to understand and not overwhelming. Restaurant managers readily accessed the insights from the platform through an easy-to-use intuitive dashboard. They could view and download reports on energy consumption, thermal compliance, food safety compliance and equipment performance. Functions such as deviation management, policy compliances, proactive detections, equipment lifecycle enhancement, and food safety have been crucial in delivering value over the past few years. The program also offered continuous training and creates awareness about the best practices for the restaurant staff.

The Result

The 5-year service program continues to focus on areas such as efficiency, guest comfort, hazard analysis and critical control points (HACCP).

Key results delivered for 73 restaurants over the past three years of engagement:

- 9.6% average engagement wide energy savings achieved
- 9% improvement in guest thermal comfort
- 21% improvement in employee comfort
- 3% improvement in walk-in freezers' temperature compliance
- 11% improvement in walk-in coolers' temperature compliance
- 8% improvement in makeline compliance

This program enabled us to do more than reduce costs. The actionable insights and remote support we received on aspects like equipment health and temperature deviations, enabled us to improve employee and customer experience. The remote monitoring of equipment health and the remote management for refrigeration and HVAC units helped avoid equipment downtime and increased equipment life. This was particularly useful in avoiding energy and food wastage.

Vikrant Vohra

Chief Operating Officer - Pizza Hut at Sapphire Foods India Pvt. Ltd.



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About EcoEnergy Insights - EcoEnergy Insights is a leading provider of outcome-based services to some of the world's largest enterprises in industries such as restaurants, retail, hospitality, banking and water utilities. Its CORTIX[™] technology platform leverages a combination of advanced software and expert human analytics to uncover insights and use them to achieve results across sites, multiple industries and a range of geographies. EcoEnergy Insights is a part of Carrier, a leading global provider of innovative HVAC, refrigeration, fire, security and building automation technologies.

