

LARGE-SCALE HVAC PROJECT

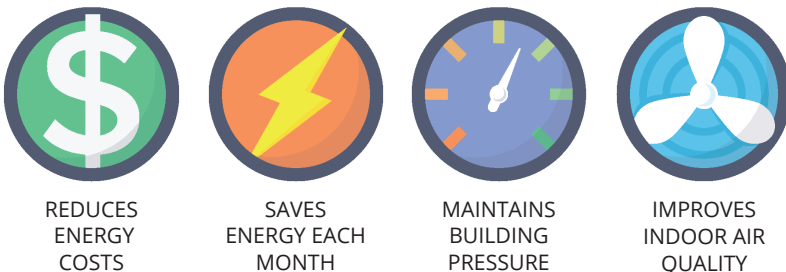
Transformative Wave's CATALYST RTU Upgrade

How optimized HVAC system technology cuts operational costs, improves energy efficiency, and enhances customer comfort for McDonald's franchisee.

THE CHALLENGE

Nearly 90% of McDonald's franchises in the U.S. are operated by small business owners like Paul Goodman of Manhattan, New York. An essential part of maintaining a successful quick-serve restaurant includes customer comfort through effective temperature control. At the same time, HVAC rooftop unit (RTU) usage accounts for nearly 30% of total utility expenses for a business. Franchisees like Paul must focus on streamlining operations and reducing maintenance costs while keeping outstanding customer experience and employee comfort in mind.

CATALYST RTU UPGRADE BENEFITS



THE SOLUTION

Transformative Wave provided the solution Paul Goodman was looking for. Their CATALYST technology RTU upgrade kit provides dynamic energy savings with Advanced Fault Detection and Diagnostics to take the stress out of troubleshooting. In case of performance issues, their web-based monitoring system—eIQ Platform—visually alerts Paul via email or text with fault diagnostics early, saving nearly 5 hours on average for repairs.

PROJECT AT A GLANCE

Customer	Paul Goodman, McDonald's
Location	New York City, NY
Installation Date	July 2016
Equipment	CATALYST with built-in BMS
Installation Cost	\$19,200 (before incentives)
Annual Cost Savings	\$4,900
Average Energy Savings	35% annually



Automated Fault Detection & Diagnostics alerts enable us to proactively schedule service calls when dampers and economizers are not working correctly, a common issue which typically goes unnoticed and contributes to higher energy costs."

— Paul Goodman

STRIKING RESULTS

Since installation, energy usage in Paul's restaurant has been cut in half. Notably, he saw nearly a **35% reduction in RTU energy usage** and **10% reduction in gas usage during the winter** (December 2016—March 2017). With these energy and gas reductions, **Paul saved his business an average of 32% (nearly \$400)** each month in the first year.

INCREASED INSIGHTS

Cost and energy savings aren't the only positives this McDonald's franchisee experienced. CATALYST's eIQ platform showcases system data in an easy to understand format, allowing Paul to see how varied HVAC performance affects energy use and indoor comfort levels. The eIQ platform even notifies building owners of HVAC operation abnormalities and where potential failures occur. This pinpointed information can help owners save time and money on repairs.

eIQ IN ACTION

DIAGNOSE

Paul receives an email or text alert when an issue occurs in his restaurant's RTU



REPAIR

He schedules a repair with diagnostic info directly from the unit, saving time and money

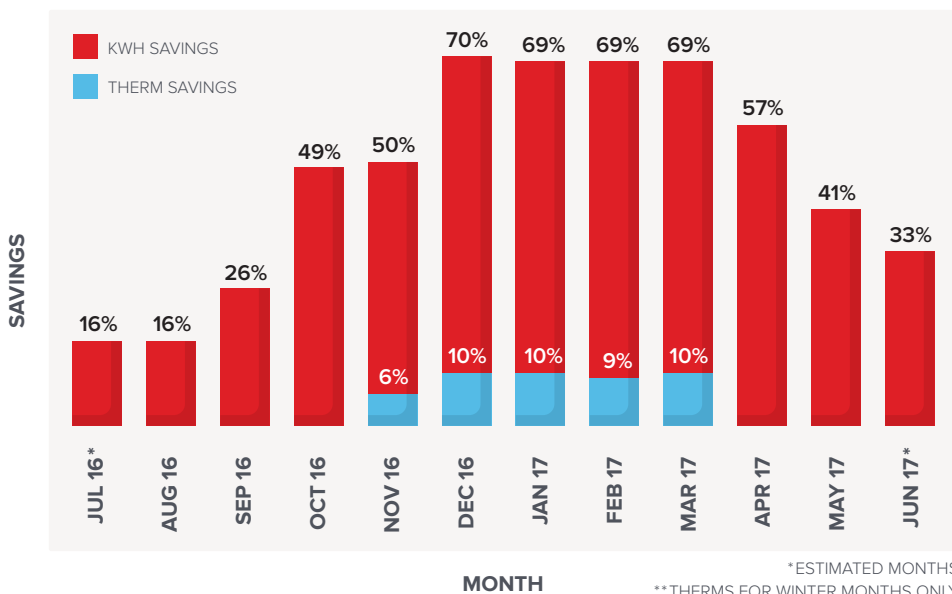


SAVE

Thanks to advanced monitoring, Paul saves about 5 hours of physical repair time per incident



RTU ENERGY SAVINGS PER MONTH



GET STARTED TODAY

- To learn more about the technology:
visit transformativewave.com
- To participate in the pilot:
email Brant Small brant@twavetech.com
- For more information:
email etac-tw@energy-solution.com



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