

Case Study



A wireless operator strengthened facility performance with predictive insights

Enhanced visibility and enabled proactive maintenance of critical infrastructure with Abound™ Advisory Services.



The Customer

A leading American wireless telecommunications company operating infrastructure, such as data centers, switching hubs, and call centers, to support nationwide network services.

The Challenge

The customer sought to improve Heating, Ventilation and Air Conditioning (HVAC) equipment reliability and efficiency across their facilities. Their teams highlighted challenges such as:

- i) Hidden HVAC issues — such as refrigerant leaks, sensor faults, and control logic errors — that often went undetected until they caused inefficiencies.
- ii) Limited real-time visibility into equipment health across hundreds of assets in their portfolio of sites.
- iii) Reactive maintenance practices that contributed to energy waste, inconsistent zone comfort, and increased risk of downtime in mission-critical environments.

The Solution

The customer engaged with Carrier Abound to tackle these challenges. Abound Advisory Services was deployed across 11 critical sites operating in different climate zones. The services include access to Abound Predictive Insights and expert consultation from the Carrier Customer Command Centers.

Abound Predictive Insights provided the ability to continuously monitor equipment behavior and applied pattern recognition capabilities to highlight anomalies, inefficiencies, and early indicators of potential issues.

The associated app enabled engineering and maintenance teams to access AI-generated actionable insights across major asset categories – including Computer Room Air Conditioner (CRAC) units, chillers and other HVAC equipment.

The customer also received support from Carrier Customer Command Centers, where experts guided them in prioritizing insights to enable remote or field-based resolution.

By showcasing hidden issues — such as refrigerant leaks, sensor faults, and control logic errors — before they escalated, the solution enabled the customer to prevent failures, reduce energy waste, and improve zone comfort. The ability to detect and present performance deviations led to smarter decision-making, improved equipment reliability, and greater confidence in operational performance.

The Reported Outcomes

Within a 5-month period, the company reported:

- i) More than 100 actionable insights related to temperature compliance across over 200 pieces of equipment.
- ii) Over 91% accuracy of the recommendations to improve the operations of the CRAC units. This minimized downtime and optimized technician visits, lowering service costs and enhancing operational efficiency.
- iii) Over 90% of the recommendations from the insights were either implemented, in progress or being reviewed, with the rest deemed low-value or infeasible.
- iv) 36 potential equipment failures were avoided through early detection of issues.

Through Abound Advisory Services, the customer shifted from primarily reactive maintenance toward a more proactive approach across critical infrastructure.

Reported benefits included improved visibility, enhanced decision-making, and greater confidence in facility operations.

Note: Customer experiences described are illustrative and based on reported outcomes. Actual results may vary depending on site conditions, equipment, and operational practices. Carrier Abound makes no guarantees or warranties regarding specific performance improvements. Customer identity withheld for confidentiality.

Write to us at abound@carrier.com for more on how we can help your company achieve its business and sustainability goals.

About Carrier Abound

Carrier Abound provides digitally connected lifecycle solutions and services for diverse building portfolios. The solutions and services enable building management to see deeply and broadly across their assets, prioritize and act on real-time insights, and refine, adapt, and scale on a continual basis to improve energy efficiency and asset performance, enhance occupant comfort and productivity, and streamline compliance reporting. Carrier Abound is part of Carrier Global Corporation, global leader in intelligent climate and energy solutions.

For more information, please visit abound.carrier.com and join the conversation on [LinkedIn](#).

