

Case Study



A financial services company banks on Carrier ABOUND to become more sustainable

The retail banking firm used our IoT-enabled solution to connect, control, and optimize its branch network and reduce its carbon footprint.



The Customer

A large private bank in India, offering a wide range of financial services, with close to 5,000 branches and over 15,000 ATMs, cash deposit and withdrawal machines.

The Challenge

The bank focuses on leveraging digital technologies to drive differentiation and offer a great experience to its customers. The bank branches are central to that.

One of the key challenges for the bank was controlling and monitoring critical equipment such as heating, ventilating, and air conditioning (HVAC), lighting, ATMs, servers, etc., across its branches. The size of the branches and their extensive geographical spread across the country made it difficult to control and optimize energy costs. Issues such as power factor penalties and diesel generator running costs also increased the monthly energy expenses. Through efficient energy consumption at bank branches and ATMs, the bank could not only save on costs but also decrease greenhouse gas emissions, reducing their carbon footprint.

To optimize energy consumption while enhancing customer and employee comfort, the bank engaged Carrier ABOUND.

The Solution

The bank worked with Carrier ABOUND and rolled out an IoT-enabled solution for 600 of its branches across India. Initially, performance data was gathered from all existing building automation and energy management systems. The team analyzed the historical energy spend of branch equipment such as HVAC, lighting, IT Infrastructure (laptops, computers, printers, servers, ATMs, etc.) along with other miscellaneous loads to identify appropriate branch-specific energy-saving strategies.

The bank branches were then kitted out with the ABOUND Edge system – a system of hardware, software, and an orchestrator – with 16,000 pieces of equipment integrated

with the system. With a wide range of functional enablers, the Abound Edge system provides banks with the ability to control and manage connected equipment at their branches.

The system enabled the bank to optimize the branch networks' maintenance processes by making them proactive. The facility managers could avoid equipment and process-related problems that typically lead to downtime. Carrier Abound provided reports to the bank which included weekly and monthly summaries of deviations and recommended improvements, enabling the facility managers to avoid energy wastage. Besides increasing the efficiency of the branch and ATM operations, the regional facility teams were empowered with critical insights on equipment performance after a service activity was completed. This enabled them to determine whether the issue was correctly addressed or not, thereby ensuring the effectiveness of the maintenance activities.

The solution utilizes the Service Window® framework. The framework shows unique energy and business profiles that a typical branch goes through during its daily operations. Based on effective monitoring of energy consumption in these service windows, the team detected and plugged energy deviations or leakages that occurred on a day-to-day basis. This provided relevant information about branch energy consumption patterns and variations during business and non-business hours along with monthly insight reports. The facility managers could then easily navigate and understand operational anomalies and energy profiles, as well as customer, employee, and equipment compliances.

Real-time tracking for energy equipment like diesel generator (DG) sets, uninterrupted power supplies (UPS) and HVAC equipment was enabled. Operation and maintenance alerts were deployed for HVAC equipment, ATMs, server rooms and other branch areas.

The Result

Uniform energy policies were implemented to reduce the carbon footprint and improve the customer experience at the branches.

Key results achieved during the year from April 2022 to March 2023 for 600 branches:

- i) Over 14% energy saved. This is equivalent to saving over 3,000 tons of carbon dioxide emissions
- ii) 5% improvement in occupant comfort compliance
- iii) 12% improvement in server rooms temperature compliance
- iv) 17% improvement in ATM area temperature comfort

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](#).

