

OPTIMIZING POWER CONSUMPTION BY ANALYZING SENSOR DATA



Integrate
real time data
from sensors



Take Informed
Decisions



Lower
Consumption &
Costs

The Client

\$15 Billion HVAC maker in the United States of America

Industry

Energy & Utility

Overview

Heating Ventilation & Air Conditioning (HVAC) systems installed in hundreds of premises distributed in a wide area, each system having dozens of blowers, and each blower connected to dozens of sensors. Each sensor senses and reports to a central server the following details: the room temperature, the extent of vent opening, and other relevant readings.

Business Challenge

The client wanted to store the sensor data and build suitable models to automate the analysis and suggest recommendations for optimizing power consumption.

Our Approach:

We built a centralized Big Data repository for the sensor data and used it to automatically predict adjustments needed at the sensor, blower & property levels, so that energy consumption is globally optimized.

Outcomes

- ✓ Optimizing ongoing processes – monitoring and verification.
- ✓ Enhanced overall performance – fault detection & resource optimization.
- ✓ Automating operational controls – making real-time decision.