Charter Global™
Strategy • Technology • Solutions

Charter Global
CASE STUDY — Business Intelligence Smart home technology company

With technology expertise and innovation, smart home provider creates smarter homes and improves customer satisfaction.

About the Client

This innovative client is a leading provider of smart home technology. They offer home security, energy management, home automation, local cloud storage, and high-speed internet solutions. The company has installed more than 10 million smart home devices. They are also developing the first true smart home assistant which leverages artificial intelligence to manage connected devices throughout the home including locks, lights, thermostat, and security systems.

The Challenge

As part of its home automation and energy management solutions, the client developed a system that automatically controls temperature of a home based on data from sensors that detect activity within the home.

The efficiency of this system, however, depends on the quality of the data it receives. Incomplete or compromised data would result in inefficient energy usage and customer dissatisfaction. The challenge was to create a unique algorithm for the home environment that would improve the quality of data and how the system functioned.

Solution

Charter Global assembled a team of data scientists, data analysts, and an open source R developer The team of specialists developed an effective algorithms that would control a home's temperature. The predictive algorithms they created considered sensory data, such as movement within the home and security alarm settings, along with HVAC controls, to determine when the occupants were home, asleep, or out of the house. This data was integrated with the HVAC system using real-time, machineto-machine communications, enabling the system to adjust temperatures accordingly.

Results

Charter Global team constructed a simple integration system using sensor data and stateof-the-art HVAC technology. The system adapts to the data it receives and effectively becomes a "learning" home automation system. Applying the data effectively enables the system to recognize the occupants' patterns of activity, so it can make system adjustments for maximum energy efficiency and cost savings.

Why Charter Global

• Founded in 1994; Headquartered in Atlanta, GA with development centers in the U.S, India, and Serbia.
• Developed a portfolio of over 100 successful project implementations.
• Nearly 1000 full-time IT professionals support client projects.
• Established customer base of Fortune1000 industry leaders.
• Our experience spans pharmaceutical, manufacturing, telecom, finance, health care, media / entertainment, airlines, energy, retail and hospitality industries.
• Active database of nearly 2M consultants.
• Experienced Talent acquisition teams support client projects.

About Charter Global

Charter Global drives innovation in IT projects and business operations by defining strategy and providing consulting, digital solutions, custom development, and skilled resources. With an established customer base of Fortune 1000 industry leaders and over 100 successful project implementations, our experience and proven methodologies enable our professionals to deliver industry leading solutions in cloud technologies, open source, DevOps, mobility, CRM, AI/ML, AWS, SAP, Microsoft & Pega BPM.