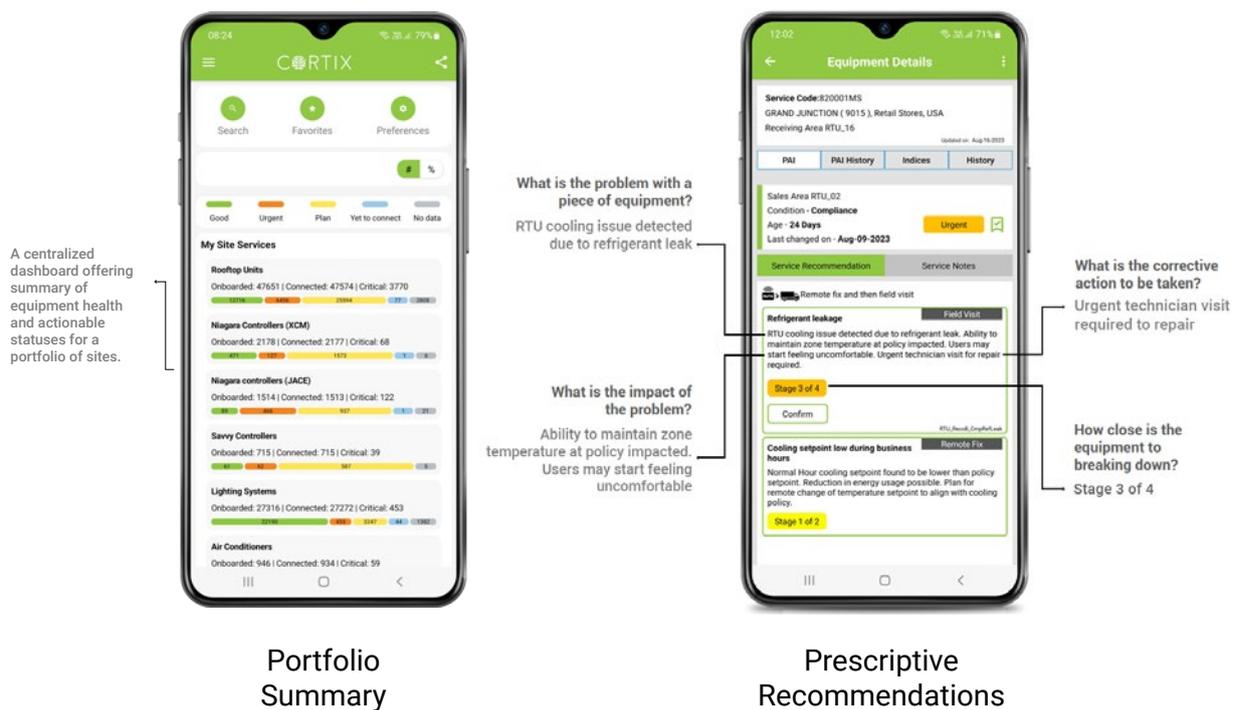


AI Assistance For Retail Store Energy Efficiency

The CORTIX™ platform enables saving the time, effort and costs involved in operating and maintaining store equipment and making them energy efficient.

The CORTIX platform is an Artificial Intelligence (AI) and Internet of Things (IoT) platform that focuses on predicting equipment behavior and enabling retailers to operate them efficiently. The platform analyzes data from connected equipment and either acts on the predictions automatically or provides prescriptive recommendations in natural language. Implementing the recommendations helps retailers to prevent equipment failure and reduce maintenance and energy costs.

The CORTIX assistant interface simplifies the execution of the recommendations by bringing together retail energy managers, facility managers and maintenance partners in an integrated, intuitive user interface. The CORTIX assistant interface summarizes the recommendations from the CORTIX platform and helps users create and execute worklists. These worklists are proactive and can be prioritized according to the urgency of the situation.



The CORTIX assistant's intuitive interface enables energy and facility managers to:

1. create worklists categorized by trade (HVAC, electrical, controls etc.)
2. distinguish between tasks that can be executed remotely or onsite
3. export and send worklists to appropriate maintenance partners
4. track and validate the progress of the maintenance activity
5. check the effectiveness of the maintenance activities



Facility managers can subsequently extend the assistant interface's utility to include their maintenance partners, who can:

1. receive a prioritized CORTIX assistant enabled work list and plan their activities
2. review system generated recommendations and repair history, and carry out repairs
3. confirm, update or scan in the repairs and parts utilized
4. validate their work from the equipment health status
5. export and email their work summary to their supervisors or back to the facility managers

The implementation of the recommendations brings visibility, agility and predictability to operations by:

1. reducing unplanned equipment downtime, which improves user experience and reduces emergency repair costs
2. enabling "early repairs" instead of "near to failure repairs", thus reducing wear of critical parts and avoiding costly replacements
3. enabling effective and comprehensive maintenance in each visit, increasing the mean time between failures and the 'time till the next maintenance visit'
4. enabling accurate repairs, without depending on the experience level of the visiting technicians

The CORTIX platform delivers value to retailers

For a large retailer with over 1,900 connected stores in North America, the use of the CORTIX platform enabled:



Average energy savings of over 18% in the last 5 years



27% improvement in the mean-time between HVAC technician visits to sites in 2022 vs. the baseline of 2015



94% temperature compliance in the stores

Get your retail stores connected to the CORTIX platform

The CORTIX platform enables a new way of working with store equipment for maintenance and operations. The platform offers usage of its CORTIX assistants* for most of the equipment categories from multiple Original Equipment Manufacturers (OEM), that are typically installed at retail stores including:

1. Heating Ventilation and Air Conditioning – Roof top units (RTU, constant and variable volume), unit heaters, etc.
2. Lighting – Dimmable and non-dimmable systems
3. Refrigeration cases
4. Building Management System (BMS) Controllers – WebCTRL® controllers, Niagara Framework® controllers, etc.
5. Site sensors and meter network

*The detailed catalogs of capabilities of the CORTIX assistants are available on request.



Each of the CORTIX assistants cover multiple aspects of the above categories of equipment, be it mechanical, electrical, controls or connectivity problems.

Connecting to the CORTIX platform is simple with multiple BMS and IoT connectors available, including an open API for streaming data. A recommendation feed API from the platform is available for integrating with a retailer's own business applications.

Why choose the CORTIX platform over others?

	Other platforms	The CORTIX platform
Approach	Reactive	Proactive
Intelligence	Fault Detection and Diagnostics (FDD)	Preventing the failures in equipment and their processes from occurring
Application of Intelligence	What went wrong? What is the root cause?	What is to be done to prevent something from going wrong?
Outputs	Graphs and charts	Natural language recommendations, as well as graphs and charts for further analysis
Equipment supported	Specific to one stack	Multiple stacks and multiple ways of integration
Business Model	Mostly SaaS or on-premise	Multiple models: SaaS, outcome based service with flexible pricing models

The CORTIX platform is connected to more than 320,000 pieces of equipment.



The CORTIX platform was adjudged 'Best Predictive Analytics Platform' at the 2021 AI Breakthrough awards.



The CORTIX platform won a 2022 Artificial Intelligence Excellence Award for pattern recognition.

The CORTIX assistant can be easily adopted into established workflows. [Watch it in action!](#)

Write to us at cortix@carrier.com and elevate your business now.

About EcoEnergy Insights - EcoEnergy Insights is a leading provider of AI and IoT-enabled solutions to digitally transform building and equipment operations. Their CORTIX™ platform collects data from multiple sources, analyzes it, acts on defined deviations autonomously and offers predictive actionable insights. The platform, combined with expert human analytics, has been delivering award-winning outcomes in comfort, maintenance and energy efficiency across multiple industries such as retail, hospitality and banking. EcoEnergy Insights is a part of Carrier Global Corporation, global leader in intelligent climate and energy solutions that matter for people and our planet for generations to come.

For more information on EcoEnergy Insights and the CORTIX™ platform, visit ecoenergyinsights.com and cortix.ai. Join the conversation on LinkedIn, Twitter and Facebook. Subscribe to the EcoEnergy Insights YouTube channel for demo videos of the CORTIX Assistant.

