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EV Pilot Program Quickly Proves Test Concept

Context

A mixed fleet of private and public charging stations in the Pacific Northeast needed to test their concept of a resilient charging system. The team wanted to enhance system resilience by using a combination of edge devices (vehicle-mounted hardware that collects and shares data) and cloud computing.

While cloud solutions are comprehensive and accessible, they can sometimes lose internet connectivity. Edge solutions, which don't require internet connections, add resilience. A pilot would require combining multiple vendors, systems, and dashboards into a unified network.

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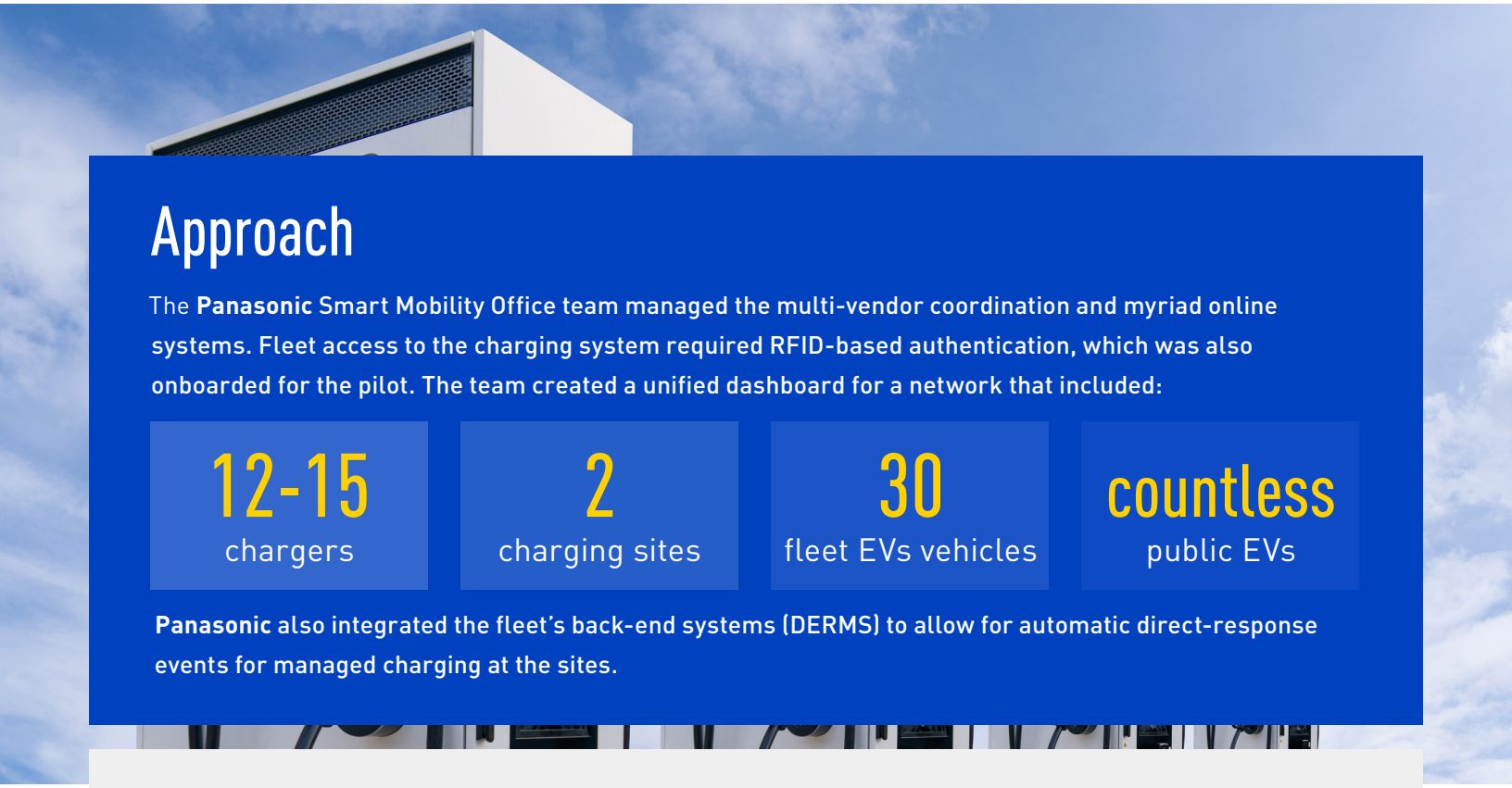


Approach

The **Panasonic** Smart Mobility Office team managed the multi-vendor coordination and myriad online systems. Fleet access to the charging system required RFID-based authentication, which was also onboarded for the pilot. The team created a unified dashboard for a network that included:

12-15	2	30	countless
chargers	charging sites	fleet EVs vehicles	public EVs

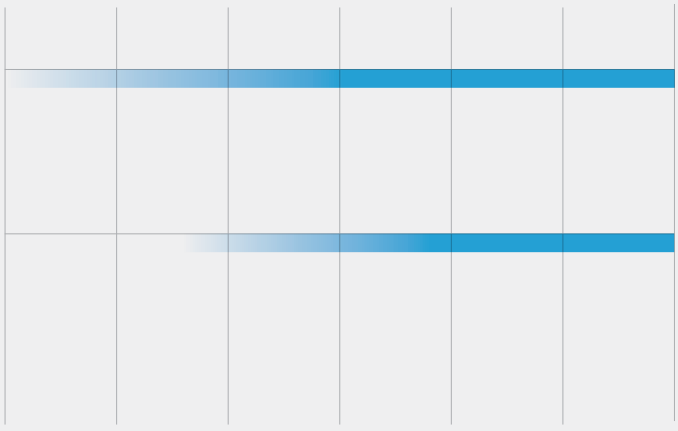
Panasonic also integrated the fleet's back-end systems (DERMS) to allow for automatic direct-response events for managed charging at the sites.

Results

In going live with the pilot (a 90-day project), the fleet confirmed that they could deploy a utility-integrated edge solution to mitigate risk, manage charging loads, and automate demand-response events. The centralized system unified five different vendors and their software packages using one dashboard.

Deliverables included:

- Fully automated communication between the Distribution Operation Control Center and pilot customer's Plant Controller.
- Fleet managers were able to curtail the maximum load kW consumption of EV fleet charging infrastructure (L2 and/or DCFC chargers) to meet system capacity constraints and accelerate load interconnection.



Learn more about Panasonic Smart Fleet Transition Solutions: *email* DL_SMO_Sales@us.panasonic.com *or visit* SmartFleetTransition.com