

## GE CONSUMER & INDUSTRIAL



GE Consumer & Industrial's (GECI) Appliances Division manufactures, sells and services home appliances. GE Consumer Home Services within GECI repairs appliances in residences, apartment complexes, hotels, motels and retail stores across the U.S.

### OBJECTIVE

GECI sought to streamline the delivery of field service to increase productivity and reduce costs, while improving customer satisfaction. With aging service equipment in the field and a large and dispersed service team requiring time-intensive management, its service costs were continuing to rise. GECI was using four call centers and 17 dispatch centers to coordinate technicians and repair locations, but the company desired that service levels be further increased.

In the face of high industry expenditures, many of GECI's competitors were also trying to determine if they should stay in the service business. GECI's goal was to maintain its service side and, in short, replace its outdated systems with a wireless system that significantly reduced overhead and increased customer service.

### SOLUTION DESCRIPTION

A team of technology providers worked together to create GECI's Complete Mobility Solution. This custom solution was deployed in 2005 across a nationwide fleet of more than 1,200 service vehicles that respond to more than 10,000 calls daily.

At the field level, each technician has a Panasonic Toughbook C-29 laptop with embedded mobile broadband (EV-DO) primarily using Verizon Wireless' BroadbandAccess connectivity.

A Bluetooth printer and credit card reader for handling receipts and payments are also on board. A Kyocera 200 module enabled by EV-DO allows M2M and telemetry applications like fleet management, asset tracking, security and exception reporting as well as wireless point-of-sale.

Annapolis-based ServicePower handled the system integration and supplied a host of overarching capabilities including: dispatch center management; service team management; dispatch and routing software; fleet management tools; GPS vehicle location software; and navigation and mapping.



[www.ge.com](http://www.ge.com)

### COMPANY

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### OBJECTIVE

- Streamline the delivery of appliance field service to increase productivity and reduce costs while improving customer satisfaction

### SOLUTION

- Verizon Wireless BroadbandAccess (EV-DO)
- Panasonic Toughbook C-29 laptops with embedded mobile broadband
- Kyocera 200 modules for M2M and telemetry applications enabled by EV-DO
- ServicePower system integration
- Bluetooth printers and credit card readers in every tech vehicle

### RESULTS

- Raised technician productivity by 16 percent as measured by calls per day
- Reduced its dispatch centers by 88 percent and the number of dispatchers by 47 percent
- Reached its ROI in one year—two years ahead of schedule
- Improved customer service ratings by three percent



**ALIST™**  
Winner



**GE Consumer & Industrial is the 2006 winner of the 3G A-List Award in the Embedded Deployment category.**

The 3G A-List Awards recognize the leading builders of successful wireless data solutions based on 3G CDMA (CDMA2000 1X, EV-DO, and UMTS/HSDPA) technology. **To learn more about the A-List, please visit [www.3galist.com](http://www.3galist.com)**

#### SUPPORTING PARTNERS

The A-List also recognizes supporting partners for their enabling role in assisting winners with their wireless data deployments.



**Panasonic®**

**KYOCERA**

**SERVICE***power*

GE Security overlaid its Automatic Vehicle Location (AVL) software and CalAmp added location messaging and AVL hardware.

The technology package offers scheduling software that is dynamically changing and puts information in front of the techs, one job at a time. There's driving direction software, a parts "look up" and real-time inventory

**Notebooks with embedded 3G CDMA allow the technicians to meet ever-changing needs in their dynamic day. This has created a wirelessly enabled, real-time work force that is dedicated to providing a better service experience for our customers.**

*Bob Sanders  
Marketing Manager  
GE Consumer Home Services*

information. Schematics, training videos and other repair information can be downloaded quickly to their laptops. Field inspection software lets a tech plug right into the circuit board on an appliance and diagnose problems. Additionally, an automated IVR system can call the customer to confirm if they are there or to simplify rescheduling. It can also let the customer know if the tech is running late.

"Instead of sending the jobs to the techs, the techs are sent to the jobs so the customer gets service when they need it rather than when a truck is in the area," says Bob Sanders, marketing manager for Consumer

Home Services at GECI. "Because of 3G CDMA technology and AVL, we can re-route techs to where the jobs need to be done and get the GPS feedback to confirm they're en route or if they completed the job. We know where our techs are every five minutes or every three miles."

"Notebooks with 3G CDMA allow the technicians to meet ever-changing needs in their dynamic day," he adds. "This has created a wirelessly enabled, real-time work force that is dedicated to providing a better service experience for our customers."

## RESULTS

GECI has been able to attribute significant improvements to its Complete Mobility Solution. Technician productivity jumped by 16 percent as measured by calls per day.

With its sophisticated mobile system in place, GECI was able to reduce its dispatch centers by 88 percent—consolidating into just two locations—while lowering the number of dispatchers by 47 percent and cutting the number of exception handlers by 30 percent. First-time repair rates rose to 90 percent and already high customer service ratings grew by three percent as well.

"We had originally planned for a return on our investment within three years," Sanders confides, "but we actually recouped our entire cash outlay in just one year."