BACKGROUND

Horizon Utilities Corporation is one of the largest municipally owned electricity distribution companies in Ontario with $487 million in assets. A Top 10 Employer in Hamilton-Niagara, they provide electricity and related utility services to 240,000 residential and commercial customers in the cities of Hamilton and St. Catharines.

CHALLENGE

Horizon Utilities launched a pilot project to replace 5,000 of its customers' traditional electricity meters with smart meters. The replacement of traditional meters with smart meters is part of the commitment of the organization to energy conservation and the environment. A smart meter contains a chip that records the per- hour use of electricity which allows customers to save money by using electricity during off-peak hours. Knowing their hourly energy consumption can also change customer's behavior, encouraging them to turn off appliances, lights and other gadgets when not in use. Smart meters also promote more efficient energy distribution by preventing overload on grids, especially in the summer when air conditioners add to the power needs of households and businesses alike.

SOLUTION

Horizon equipped each of the meter installers with an Intermec 760, a rugged hand-held device, in which FieldWorker's endlessly flexible user interface software was configured to accommodate a camera and a bar code scanner.

At the start of each day, each installer checked their handheld device for a list of customers they were assigned to visit that day. At each location, the installer took a picture of the final meter reading, scanned the barcode of the new smart meter and installed it. Enabled by FieldWorker's Enterprise platform technology, the photo and bar code data where then relayed to Horizon's Customer Information System (CIS), the company's billing engine.

"Configuring the software's business logic to capture bar codes and pictures was the tricky part of this job," said Craig Tyndall, FieldWorker's Director of Business Development.

PROFILE:
- Electricity Distributor
- Servicing Hamilton, St. Catharines, Ontario
- 240,000 customers
- 400 employees

CHALLENGE:
- Replacing 5,000 traditional meters with smart meters
- Pilot project – if successful will be rolled across the board

SOLUTION:
- FieldWorker user interface software
- Customization for use of a camera and bar code scanner

RESULTS:
- Successful Pilot
- Automated part of service order system
- Integrated FieldWorker to end-to-end meter change
- More efficient meter change process

"We've had a lot of customers who had to read bar codes and a lot who needed photos, but Horizon was the first company that required both on the same device." Adds Peter Neve, FieldWorker's president, "It was probably also the first time that Intermec's device was asked to do both things at once. We talked to the people who write their software, and between us, we figured out how to do it."

BENEFITS

Integrating the scanning of bar codes and pictures in the replacement process ensured that there were no keying errors. In addition the use of pictures reduce discrepancies in the previous meter's final reading.

Other information gathered by the hand-helds, Murray added, will help Horizon monitor the contractor's performance, which will in turn help them determine the standards for the replacement of the remaining 215,000 meters. As he put it: "The business logic we've built into FieldWorker and our billing engine will help us track the work very well. There is time-logging, and number-of-visits will tell us how many trips an installer made to a house before finding someone at home and the total amount of time that took. We're on a learning curve here, and during the mass replacement, knowing the average time it takes to install a smart meter will tell us if we're getting fair value for our dollar."

The overriding value of FieldWorker's Enterprise system is not that it can facilitate and track the work of any number of hand-held users who are doing one specific job. The company can also add as many other types of jobs and users as it wishes. Thus, Horizon has already implemented the first of what will probably be many in-house applications it will find for FieldWorker.

This involves the routine replacement of faulty meters by field technicians. Until very recently someone had to prepare paper work orders, which the technicians took to the job sites, wrote the required information on them and returned the paper to the office for filing.

"We've totally automated part of our service order system, integrated FieldWorker to do an end-to-end meter change. The data-entry person is the actual person out in the field, and after that, it's never touched by human hands again. It has worked well," said Brent Murray, Manager of Customer Services and Contract Administration at Horizon Utilities.

"We really hope the other 60 or so utilities take notice of what we're doing in Hamilton and St. Catharines," Tyndall says. "The smaller companies might think they don't need to invest the money or believe they can do it themselves, and the bigger ones are so used to shelling out tons of money for mediocre solutions, they might think our low costs are a measure of our strengths. But the ROI is there for small and large companies alike. We've provided Horizon with a very cost-effective and extremely powerful solution."

"And they appreciate it," says Peter Neve. "One of their project managers sent a note to one of our partners, saying the beauty of FieldWorker is that it's simple and it works. And we do try to keep things simple, but powerful."