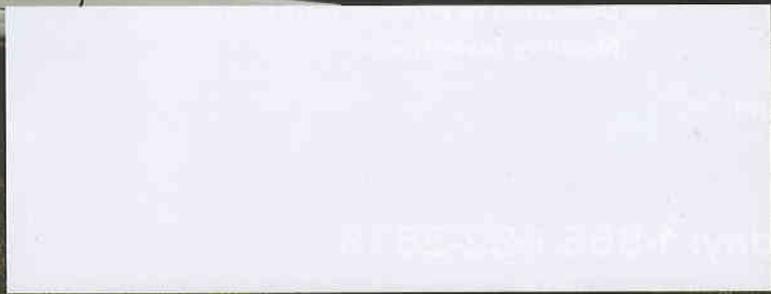FieldTechnologiesOnline.com

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OPTIMIZE FIELD WORKERS, SERVICE & ASSETS

DISH
Puts Its Focus On
Customer
Experience

DISH's mobile solution upgrade has unlocked opportunities to improve customer service, including 75-minute appointment windows and a customer-facing mobile app, p.6.

Nick Rossetti, senior vice president of In-Home Services at DISH

DISH
Puts Its Focus On
Customer Experience

by Brian Albright

A s the second-largest satellite television provider in the U.S., DISH operates a massive field service network. The company has 170 field offices and more than 5,000 vehicles. In addition to its thousands of service technicians, there are another 5,000 to 7,000 third-party technicians working for the company at any given time, depending on the season.

With roughly 14 million television and broadband subscribers and more than $15 billion in revenue, just about every move the company makes is big, including its investments to improve field service operations. When DISH initially rolled out a mobile solution for its field technicians in 2009, it was touted as the largest rollout of a completely cloud-based mobile workforce management solution up to that point. The company deployed the TOA Technologies ETAdirect (which is now Oracle Field Service Cloud) solution to its field force of more than 14,000 technicians in less than four months following a nationwide rollout of highly rugged laptops for its

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vehicles.

DISH selected TOA initially because the solution would both help improve efficiency and reduce costs, as well as improve the customer experience by providing shorter appointment windows. The solution included an integrated capacity management software and proactive customer communications, and could accurately route more than 10,000 jobs in 4 minutes (according to TOA's estimates). The solution was also based on HTML5, making it hardware agnostic.

That said, a lot has changed in mobile technology in the course of just a few years, and DISH has since launched an upgrade to its mobility solution that has further improved efficiency for its technicians and also allowed the company to implement more customer-friendly notifications, service windows, and other features. New mobile devices and ongoing software upgrades have helped DISH improve productivity by another 10 percent, while also shrinking its appointment windows to as little as 75 minutes and providing real-time technician arrival tracking for customers via its My Tech software.

Shifting From Rugged Laptops To Smartphones

In 2012, DISH began planning for its technology upgrade. Since the original DISH deployment, TOA Technologies was acquired by Oracle and rebranded as Oracle Field Service Cloud (OFSC). Ultimately, DISH updated its solution and moved to the most recent version of the Oracle application, in addition to upgrading its hardware from rugged laptops to consumer-grade, Android-based smartphones.

"We wanted to make sure we were providing a consumer-friendly experience," says Nick Rossetti, senior vice president of In-Home Services at DISH. "We want our customers to clearly understand and be able to see what we are doing, and we want to help enable the service technician through better navigation on the phone and by having email and texting. The more confident the technician is in their job, the greater the acceptance with our customers."

DISH also wanted the technicians to be more autonomous and to provide a standardized customer experience. The company's business and process technology group worked with IT and operations to select the new mobile devices and to help implement the new software features.

One of the biggest changes was the shift from rugged laptops to smartphones. "The old hardware was getting antiquated," Rossetti says. "We think we're the first in our industry to replace commercial devices with a single, consumer-friendly device that will allow the technicians to deliver an efficient, seamless experience to the customer."

While switching from ruggedized hardware to smartphones poses some risk of higher replacement rates, Rossetti says the cost analysis came out in favor of the Samsung hardware. "As the price came down on the

The Value Of Modular Mounting Solutions

DISH was able to update its mobile field service management solution in roughly half the time it took to deploy the original system, even though it was swapping out the mobile computers in roughly 5,000 trucks.

It was able to do this, in part, because the mounting solutions in the vehicles could be quickly converted from holding rugged laptops to securing Samsung Galaxy smartphones and tablets. The mounting hardware from RAM Mounts is not only flexible enough to handle the upgrade, but it also helps protect the mobile computers from damage due to falls or vibration while in the vehicle.

RAM Mounts offers mounting systems with a rubber ball and socket design. The company

A flexible mounting solution enabled a quick rollout when DISH upgraded from laptops to Samsung Galaxy smartphones.

offers in-house product design, development, and manufacturing to rapidly create cradles that can be adapted to fit any mobile device. The system is modular, which makes it easy to change cradles as customers update their mobile hardware.

The modular design of the mounting hardware allows users to create a system of any mounting base, arm, and device holder. That interchangeability helped DISH staff swap out the laptops and replace them with the Samsung devices at the end of a workday. Because they could reuse the base mounting hardware, the installation only took roughly 10 minutes.

"We didn't want to disrupt operations," says Nick Rossetti, senior vice president of In-Home Services at DISH. "We run 365 days a year, so an hour wasted is a commodity we never get back. Being able to update the existing RAM mounts saved us a lot of time."

Because DISH has transitioned from rugged computers to consumer-style devices, the mounting equipment plays an even more important role in protecting the hardware while technicians are driving. DISH will also continue to benefit from the system's flexibility as its mobile device needs change. For more information, visit www.rammount.com.

units, it was easier to have extra devices on hand," Rossetti says. "Our biggest concern was having proper docking stations."

Using a consumer device also made the transition to a new mobile device form factor easier. "We hire new technicians every week, and using the Android phones and tablets was very comfortable for new employees because they are used to those devices from personal experience," Rossetti says. "The adoption rate has been positive, and it didn't require a tremendous amount of training. We spent roughly 45 minutes on training for each user."

The company piloted the new devices in Denver. "We typically roll out new technology with the technicians and then have roundtables where we meet with them in the morning and the evening to gather feedback about the changes they are experiencing and work out any bugs," Rossetti says. "We're not going to roll out something to our internal technicians and third-party technicians unless we have a good, stable setup."

The original rugged laptop computers were secured in DISH's vehicles using custom RAM Mounts mounting systems that were installed over three and a half months during the original deployment. For the upgrade to the Galaxy Note phones, it took only six weeks to complete the rollout. In part, that was because DISH was able to quickly alter the interchangeable mounting equipment to accommodate the new hardware. (The company upgraded to the Galaxy S5 smartphone in 2014 and deployed Galaxy Tab S 10.5-inch tablets to its field managers. Third-party technicians can access the Oracle application using their own mobile devices.)

Providing New Levels Of Customer Service

The updated field service solution works much like its predecessor. Work orders are intelligently dispatched through the Oracle application. Technicians receive work orders on their Galaxy devices and use the navigation feature to obtain directions to the work site. They confirm the work order with their customer, do a walk through to explain the equipment installation, and perform a set top box health check using an app on the phone to ensure that the equipment is in working order.

After service is completed, customers can sign off on the work order right on the mobile phone. Technicians also have the ability to add service items to the work order while on site. "During the visit, if the technician notices that the customer's TV is not on the wall, they can offer to do a TV wall mount for them or offer surge protection or a sound bar," Rossetti says. "They can go right into the application on the phone and easily add that to the order."

With the original TOA/Oracle solution, DISH was able to boost operational efficiency and allow office staff to

"Everything we are doing with our mobile applications is related to enhancing the customer experience and making it easier for the technicians to do their job."

Nick Rossetti, DISH

focus on managing exceptions. DISH also improved job completion rates, drive time, and other metrics.

According to Rossetti, the upgrade helped increase employee productivity by nearly 10 percent by reducing the number of miles driven per job. DISH has been able to better predict when technicians will arrive at customers' homes within a reduced wait window. By communicating ETAs to customers using text, phone, or email messages, DISH has also greatly improved customer convenience.

DISH plans to further automate scheduling/dispatching over time. The company is piloting a "progressive reveal" approach to dispatching, which is expected to provide more efficiencies and better scheduling by enabling technicians to see only their current and next work orders, rather than their entire daily schedule. "In general the technicians are accustomed to seeing all of their work orders for the day," Rossetti says. "If we move forward with progressive reveal, we can give them a work order and ask them to focus just on that and not worry about the next order."

By shifting to progressive reveal, the solution will provide even more flexibility by waiting longer to commit specific technicians to a work order. That will help shrink the arrival time windows DISH gives its customers. Today, those windows have been reduced to 75 minutes.

"A progressive reveal scenario allows us to adjust the technicians quickly," Rossetti says. "The system will not move a technician that we already assigned to a specific customer. So in order to optimize the workforce and get the best technician to each work order, the system allows us to re-optimize today. If you are running long on a job, you can re-optimize to a different technician for the next customer. Now the resource centers know that the technician is in

jeopardy of not getting to the next appointment on time, so we can shift that work."

Introducing New
Customer-Facing Capabilities

The updated mobile solution has also helped DISH introduce new customer-facing capabilities that have improved service. Last fall, DISH went live with "My Tech," a new feature that lets customers know which technician is coming to their house (providing their first name and a photo) and actually track their progress using an online map prior to their arrival (similar to the tracking capabilities that Uber provides). "It's fascinating to see the van traveling in real time and know which technician is going to be there," Rossetti says.

By having access to real-time arrival data on their phone or computer, customers can wait until just a few minutes prior to the technician arriving before they go home — considerably cutting down the wait time. That's because waiting for the technician is often the top complaint customers have about telecommunications and utility companies. "We tried to alleviate that by being on time and then letting the consumer know exactly who is going to be there, and when they will arrive," Rossetti says. "We not only put a focus on having our technicians not be late but also not be early. Everybody has plans, and they commit to do certain things based on when the technician will be there. On-time performance is a big key for us, and it was a customer pain point we wanted to resolve."

Service managers are now using Galaxy tablets, which will allow them to see where the technicians are throughout the day using the Oracle application. The company also hopes to further optimize field inventory management using the solution.

"The upgrades we are making give us greater vis-

ibility and remove the field service managers from having to check in with the technicians," Rossetti says. "Everything we are doing with our mobile applications is related to enhancing the customer experience and making it easier for the technicians to do their job. Eventually, we'd really like to go to what we consider a zero-dispatch model, where the field service organization is essentially managing

Services offering, DISH offers services like TV installation, sound system installation, and even smartphone repair for customers who aren't using the traditional DISH offerings. "We can get to virtually any ZIP code in 4 hours," Rossetti says. "There are a lot of needs that customers have, whether that's home automation or security, and we've been thinking a lot about how we can offer our

the schedule itself."

Over time, this focus has allowed DISH to reduce the headcount among its resource coordinators/dispatchers. "We're taking that to another level where the field service managers have greater visibility into what the technicians are doing in the customer's home via the mobile application," Rossetti says.

The mobile solution has also helped maintain those efficiency and service levels as DISH expands into other types of services. Under its Smart Home

services to both DISH customers and non-DISH customers."

While the mobility investment initially provided internal productivity gains for DISH, the company has evolved its field service automation system to extend visibility both internally and externally to its customers. Improvements in scheduling and monitoring work orders have also made it possible to explore new revenue opportunities while improving customer service.   ●