



USER INTERFACE

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Diebold Boosts Field Service Efficiency With Video Collaboration

Real-time video has helped Diebold cut training time by 35 percent as well as improve call resolution times.

Bill Fletcher, vice president of global remote services delivery at Diebold

DIEBOLD

Diebold Boosts Field Service Efficiency With Video Collaboration

by Brian Albright

The availability of relatively low-cost and high-quality mobile video streaming tools has enabled a new level of mobile collaboration, and field service companies have taken notice. According to Aberdeen Group (“Video Collaboration in the Field: See the Path to Resolution”), 22 percent of best-in-class

staff. Video also provides an effective and efficient means of ramping up training activities without pulling technicians from the field for multiple days.

Aberdeen’s research points out that video helps improve training without impacting productivity, gives technicians expert advice and training so that they can complete repairs on even unfamiliar equipment, and provides verification that work has been completed. It was exactly those benefits that inspired Diebold to launch a video collaboration initiative for field service technicians that work on its network of ATMs.

According to Bill Fletcher, vice president of global remote services delivery at Diebold, they deployed the Librestream Onsite video collaboration platform over Verizon’s 4G LTE cellular network to help its technicians provide better service to its customers and also aid in accelerating the training of new technicians. Diebold has already seen a dramatic reduction in the time it takes to train technicians using the technology and has improved first-time fix rates.

Real-time video has helped cut training time by 35 percent and improve call resolution times.

field service companies are already using video collaboration tools, while another 47 percent plan to use them in the future.

These solutions give technicians access to an expanded knowledge base and to remote expertise, and they can more effectively collaborate and improve communication with remote experts and other support

staff. Video also provides an effective and efficient means of ramping up training activities without pulling technicians from the field for multiple days.

Training Improvements Critical

Diebold turned to video in order to improve the way technicians and support staff communicate. “We’re always looking for ways to bring the field closer to our support team,” Fletcher says. “When we’re talking on the phone to the technicians, communicating how something looks is always difficult. We tried some public software like Skype, but we needed something more secure and suited to our environments.”

Diebold also wanted to reduce the amount of time it took for technicians to establish competencies in repairing ATMs and other equipment. The company has two groups of technicians: first-line techs who take care of simple issues with the ATMs like fixing paper jams or removing torn money and second-line techs who repair hardware, replace parts, and manage software.

Moving a first-line technician up to second-line level traditionally took from six months to two years because of all the required hands-on training. Because that training had to take place in the field, Diebold had to send those technicians out to ride along with second-line technicians, which tied up double the resources. The company wanted a way for more experienced technicians to provide guidance and training to first-line technicians without having to be there in person.

Because the technicians are working on ATMs that include proprietary technology and important security features and are doing so in sensitive areas of the banks they service, the company needed a secure wireless solution that wouldn’t compromise their customers’ security or their own intellectual property. Diebold contacted its wireless carrier, Verizon, to ask about potential solutions. Verizon suggested Librestream.

“The timing of this was very good, because we were also moving to a multi-vendor service initiative,” Fletcher says. “Rather than work on just Diebold equipment, we wanted to service competing platforms. At the end of the day, they are all electromechanical devices. With an aptitude in that technology, even if you’ve never seen the equipment before, someone could guide you through what needs to be done. With remote video, our experts can help guide and train the on-site technician to resolve the issue quickly and efficiently.”

Pilot Reveals Video Potential

In order to test the new system, Diebold connected technicians in New York with support experts in Wisconsin using the Librestream tool. That test served as the pilot for the system.

“We worked with a local service manager there and put the solution on some different types of hardware,” Fletcher says. “It was a very small pilot with just a couple of technicians. On the other side, we had about 20 level-one tech support people who could access the solution.”

How Virtual Presence Benefits Field Service

Diebold knew that using video could help improve communications between its field technicians and support staff. In fact, the company had already tried using some off-the-shelf solutions like Skype. However, the only way for the technicians to truly be able to leverage video to improve service activities and training would be to have a secure system with reliable video capabilities.

When wireless carrier Verizon suggested Librestream’s Onsight Connect solution, Bill Fletcher, VP of global remote services delivery at Diebold, saw that it would meet all of the company’s needs. “We needed something that could go right on our mobile devices, and Verizon supports our Samsung phones,” Fletcher says. “The application was also very easy to use, and it met our security needs.”



Using the telestration feature of Librestream’s Onsight Connect solution, Diebold staff can draw over the live images.

Onsight Connect creates a “virtual presence” for remote experts and is

designed to provide high-quality video with minimal bandwidth. It supports Android, iOS, and Windows. The latest version of the solution also includes call center workflow integration and supports both tablet and PC-based Windows platforms.

Technicians can communicate about service via real-time mobile video of the asset. Equipment manufacturers can even be pulled into video sessions when necessary, which helps shorten repair times. Senior technicians can also guide newer employees through complicated repairs remotely. Using the telestration feature, support staff can identify areas for more analysis by drawing over the live images.

Unlike video chat tools like Skype or Google Hangouts, the solution provides full control over video and audio quality. Users can remotely zoom, capture images, freeze frame, record sessions, and share files. If technicians are working in an area with low bandwidth, the solution can still provide detailed collaboration. The Bandwidth Adaptive Streaming (BAS) technology adjusts performance for cellular and other variable bandwidth networks.

The video sessions can also be stored and used later for reference or for training purposes. In addition, Diebold has fully centralized management over the licenses, updates, and configurations of the solution, so they can easily share the application with whatever technicians happen to need it at the time. For more information, visit www.librestream.com.

One major discovery during the pilot was that the video solution made it easier to guide first-line technicians through more complex repairs and improve training without dispatching a more experienced technician from another territory. “We used a first-line technician in the pilot, who hadn’t had time to go to training,” Fletcher says. “We connected him with another technician via the video system and had the other tech walk him through the repairs. By the time he was able to go to the actual training, the speed-to-competency was so much faster. He’d already been exposed to the machine and the methodology.”

After the month-long pilot, the company launched the video solution in September 2015 with 400 licenses. “We distributed it as evenly as we could geographically for technicians who may have to work on new equipment they hadn’t seen before,” Fletcher says. “We started in places where we have a lot of new work in markets like Dallas or Atlanta, and in Florida and California.”

The deployment took roughly 90 days. Initially, Diebold used harness-style cameras similar to the GoPro that could be mounted on the technician’s head or body. “What we found is that people move a lot more than we thought!” Fletcher says. “They’d turn to get a wrench and the camera was going all over the place. We switched to using the camera in the phone and mounting the phone on a small tripod so it can stay in one place. Then our support experts can take over the camera to pan and zoom.”

Fletcher says the training was fairly quick, since the technicians were just adding an application to their phones. Support staff had to be trained to operate the video application, but otherwise “It was extremely easy to get up and running,” Fletcher says.

Support Staff Control Camera Feed

Diebold’s technicians carry Samsung Galaxy S5 smartphones and are dispatched to service calls using a solution from ClickSoftware. Using the video solution, technicians can work directly with Diebold accredited remote support from anywhere in the country. Technicians can also communicate with third-party vendors when necessary. This helps ensure accurate repair of other manufacturers’ equipment.

If a technician needs assistance, they call into the level-one support desk; based on the type of call, the technician is routed to the appropriate support staff member. The support staff member asks the technician if they have the Librestream application on their phone. Diebold bought 400 licenses for the video solution, which it can use with any of its technicians as the need arises.

If the technician has the application, the support expert advises the technician to put the phone on the tripod and point it at the equipment.

“From there, they can walk the technician through what they need to do,” Fletcher says. The Samsung phones feature 16-megapixel cameras with an equivalent focal length of 31mm.

While it was possible to collaborate over the phone in the past, the video stream adds a valuable visual element that can help make sure the support team has all of the information it needs to assist the technician. There is less opportunity for miscommunication and guesswork.

Using the live video feeds, teams can quickly resolve maintenance issues and complete safety inspections. Technicians can share live video, images, drawings, and audio with other technicians or supervisors using the Librestream solution on their smartphones or tablets. The remote service experts can control the camera by zooming and panning in order to ensure the best view of the equipment or other content. They can also draw on the screen and share documentation.

“They can securely tap right into the phone and take control of the camera, so they look at the equipment and let you know if something is not in the right place,” Fletcher says. “They can guide the technician rather than just talking them through it.”

Video Enables Faster Training, Improved First-Time Fix Rates

According to Fletcher, the video solution has helped decrease service resolution times and improve efficiency in the field. That has helped boost first-time fix rates.

First-time fix rates are a critical metric for Diebold and its customers. Using video collaboration, the company has been able to maintain a first-time fix rate of 80 percent.

The video application also provided additional field intelligence. “With ATMs, we don’t necessarily use the same part every time,” Fletcher says. “This gave us the ability to understand what version of the part or module was truly in the machine, so we could identify the exact replacement modules.”

The solution has reduced costs because the company no longer has to send multiple technicians to a site for training purposes or to resolve a complex repair issue. Time-to-competency for new technicians has been cut down to just one month, a roughly 30 to 35 percent improvement. “We basically took out about a third of the time needed for training,” Fletcher says.

The system has also freed up resources. “If I hire a technician and I can’t get them to the training for a few months, they’d have to ride along with an experienced technician until they received all of that training,” Fletcher says. “We’d have one person doing the work and one person standing there watching them. Now, that same experienced technician can be on the phone with three or four technicians at once,



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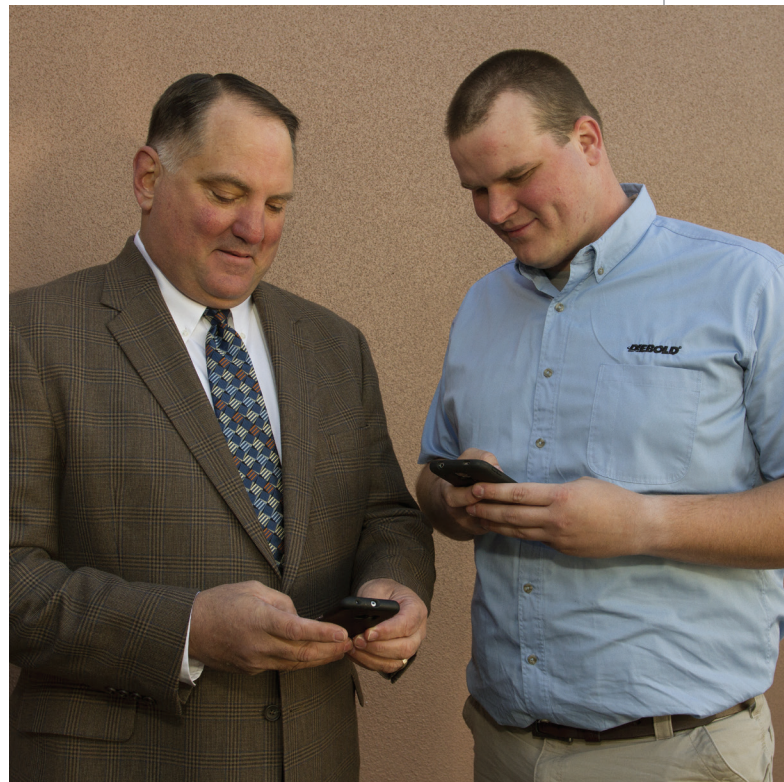
Bill Fletcher, Diebold

walking them through these procedures. Their productivity is much higher.”

Fletcher says the most important thing he learned from this implementation was the importance of getting buy-in from the end users. “We have 2,500 technicians around the country, and if you try to roll something out without involving them early, you get 2,500 different versions of it,” Fletcher says. “You start by getting that buy-in, which is what we did with our pilot in New York. Our service manager there saw the value in the system and became our champion for the solution.”

Other Diebold divisions are now asking about using the solution as well. Right now, the video system is used for ATM maintenance and repairs, but the physical security division is investigating using the system for technicians who work on safes and vaults. “It’s gotten to the point that repairing those old safes is such an art we have to fly somebody in to look at them,” Fletcher says. “With the video system, we could put somebody in front of the safe and walk them through how to fix it using video.” •

Librestream’s Onsite Connect solution enables Diebold technicians to quickly and easily communicate with back office experts.



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