MOBILITY SUCCESS STORY

Anthony Marano Company

The Third Time is the Charm for the Continuous High-Quality Voice for its Mobile Workers

The Chief Technology Officer at Anthony Marano Company likens his company’s produce distribution operation to that of a Wall Street trading floor. His comparison is not far off when you understand the real-time order and delivery nature of Anthony Marano Company’s business, and the amount of perishable agricultural commodity it moves each day.

“We have just-in-time delivery and real-time communications needs that parallel financial markets,” said Chris Nowak, Anthony Marano Company’s CTO. “We work in a competitive market where we need very fast responsive times.”

Up to 3,000 produce orders are placed and fulfilled each day at Anthony Marano Company, and approximately 90 percent of orders are shipped on the day they are received. A missed call, just like a missed stock trade, could easily cost the company thousands of dollars, not to mention a lost customer, Nowak said.

Company Background

Founded in 1950 by Anthony Marano and his wife, the company is located near downtown Chicago. It was started as a tomato repacker, and today serves the entire Midwest with fine fresh produce from its state-of-the-art distribution center. The 460,000 square foot facility contains 73 docks to receive and ship more than 1,400 types of fresh produce seven days a week. Today the company stands as one of the largest fresh produce distribution centers in the United States.

The Problem

According to Mr. Nowak, the bulk of Anthony Marano Company’s workforce are corridor warriors—they are mobile inside and outside the “four walls” of the office and distribution facility—and their main challenge is a lack of high quality wireless voice coverage. The distribution center’s large metal and concrete facility makes continuous cellular communications impossible for the staff which is constantly on the move between inside produce areas and offices, and outside shipping docks and receiving docks. Accessibility for these employees is critical because of the thousands of calls and requests the staff receives daily, and due to the fact that the company deals in fresh produce, a perishable commodity.

“We work in a competitive market where we need to be accessible and respond quickly, and to be able to do that we
need the very best in voice quality,” Mr. Nowak said. “Customers rely on the ability to reach us when they call, and for us to have the right product at the right time for the right price for them. If not, they will go elsewhere.”

Previous Solutions

It is not surprise that Anthony Marano Company has had some sort of indoor wireless system in place to try to meet this need ever since its state-of-the-art distribution facility was built in 2000, due to the inability of mobile users to get a cellular connection indoors. But it wasn’t until 2004 that Mr. Nowak installed a mobile convergence solution, hoping that workers indoors could move to outdoor shipping or receiving docks, or anywhere away from the facility, and maintain a seamless wireless voice connection.

Being an Avaya shop, Mr. Nowak first tried a solution brought to market by Avaya’s joint venture with Motorola and Proxim, called Seamless Converged Communications Across Networks (SCCAN). The solution paired dual-mode Motorola CN620 phones with WLAN controllers and access points co-developed by Avaya and Proxim. But it was early on for mobile convergence, and Mr. Nowak and his team learned that the system had difficulty doing AP to AP handover during call initiation and delivery.

Always on the move, employees walking or driving pallet jacks could not make calls, and if a call was coming in it would be missed and land in voicemail. The system used a specialized phone—the Motorola CN 620—that did not support applications such as mobile email attachments (very important when you need pictures of vegetables), and wireless contact and calendar synchronization. Rather, users had to visit Mr. Nowak and his staff in IT to do hardware synchronization between contacts, which was not practical.

“The primary focus of these efforts has been our sales staff, buyers and management team, because their productivity is the key to our success,” Mr. Nowak said. “We are more successful and make more money when our buyers and sales staff get calls the first time around, and calls don’t land in voicemail.”

Last year, Anthony Marano Company deployed a carrier convergence service from T-Mobile that is designed for consumers. This solution uses the Unlicensed Mobile Access (UMA) standard to handover calls between Anthony Marano Company’s Wi-Fi WLAN and a carrier’s licensed cellular network. This service transferred Anthony Marano Company’s fixed mobile convergence (FMC) server functions to a UMA controller on T-Mobile’s network.

The service worked better overall than the previous solution, but handoffs between Wi-Fi and cellular were not reliable. In addition, the UMA solution suffered significant delays, with times of up to 20 seconds for call completion, and additional 20 second delays for operations such as forwarding calls. This is because calls are routed over the Internet to T-Mobile’s central office, then back to the Anthony Marano Company’s PBX, which then routes it to the UMA-enabled handset.

“The system runs on Ascendent Systems with RIM Blackberries,” Mr. Nowak explained. “Ascendent is not sophisticated, it is not reliable and it lacks capabilities. We learned that the Ascendant server is even less reliable than our ancient Avaya/Motorola system. Ascendent required our users to wait for a ring on the target phone before completing a transfer, but our end users were never patient enough for the call transfer feature.”

Third Time is the Charm

Then, earlier this year at an industry event, Mr. Nowak learned about ShoreTel Mobility (then Agito Networks), an enterprise mobility company delivering mobile Unified Communications and convergence solutions directly to enterprises. ShoreTel Mobility bypasses the need for carrier integration—it works with all carriers—and
uses patent-pending technology that works on a variety of smart phones and promised to deliver a superior user experience to Anthony Marano Company’s previous solutions, and any that Nowak had seen before, he said.

“When we first ran into ShoreTel Mobility we were interested in its solution because we heard it uses SIP and would solve all of our timing and handoff issues,” Mr. Nowak said. “We also heard it ran on Nokia and Windows Mobile phones, among others, which would give us all the functionality we need in a mobile handset, including a full suite of deskphone features, such as call transfer. ShoreTel Mobility’s high availability is also very important to us.”

The ShoreTel Mobility solution is made up of the Mobility Router which operates in an enterprise’s data center, and lightweight clients which are loaded on users’ phones over the air. The router natively integrates into enterprise infrastructure, such as WLANs and PBXs, as well as with Active Directory and LDAP directory stores. It provides for mobile policy deployment and enforcement, and high-availability failover capabilities. Together with the client, the router extends deskphone features to mobile phones and enables continuous wireless coverage with <100ms, automatic handover between Wi-Fi and cellular networks.

Following some initial meetings and due diligence, Mr. Nowak and a small group of trial users set off on what would be a four-week evaluation. He said some of the criteria the team used to evaluate ShoreTel Mobility included speed, reliability, functionality enabled in the handset, and speed and quality of handoff between Anthony Marano Company’s Meru Networks WLAN and outdoor cellular services.

“This is our third solution trying to achieve our goals, and we initially rolled ShoreTel Mobility out to our most demanding and mobile user population,” Mr. Nowak said. “This first group of users was our key ownership, management and top sales people, and that shows what a high priority this is for the company. From the trial we learned how ShoreTel Mobility lets us be productive and mobile with the fastest seamless handover we’ve seen, unlike previous solutions we’ve had. We also heard the excellent voice quality over Wi-Fi ShoreTel Mobility delivers, and were impressed.”

After the successful trial, Mr. Nowak soon began what would be a full-scale rollout to his mobile user population.

“Our users say that ShoreTel Mobility offers us the whole package, and they are pleased with the voice quality, address look up synchronization, and speed of handover moving inside and out,” Mr. Nowak added. “This is a demanding group that’s hard to please—their jobs depend on the performance of this technology—but they told me that they are very impressed. That’s good to finally hear. For us, ShoreTel Mobility’s unique seamless handoff capability promises to be a technological leap from previous solutions we have seen and tried.”

About ShoreTel Mobility

The award-winning ShoreTel Mobility is the industry’s first and only business mobile convergence platform that uses RF-based, location-aware technologies to reliably mobilize voice over 802.11 wireless LANs and data applications, while remaining agnostic to enterprise customers’ choices of mobile carriers. It supports all leading IP-PBX and WLAN equipment vendors to uniquely fuse 802.11 wireless LANs, enterprise IP telephony, and the carrier cellular network, improving mobile worker accessibility and responsiveness to increase mobile worker productivity.

ShoreTel Mobility’s innovative, patent-pending location-aware technology allows enterprises to mobilize high quality voice by taking advantage of their 802.11 WLAN deployments as a low-cost alternative to cellular networks for in-building enterprise mobility. Its patent-pending technology ensures that in-building calls stay on the enterprise WLAN (using VoWLAN), to reduce cellular expenses and eliminate dropped or poor quality calls. ShoreTel Mobility uses the largest set of routing metrics in the industry to determine the time and place for Wi-Fi/cellular network handover,
including network cost, load, reliability, delay, location, packet loss, battery life, call or session quality, and signal strength to route mobile device voice calls quickly and automatically between Wi-Fi networks and cellular networks.

The eFMC Ecosystem and Deployment

Anthony Marano Company’s enterprise FMC (eFMC) ecosystem consists of Meru Networks WLAN access points, an Avaya Definity 8710 PBX, T-Mobile and AT&T cellular service, and Nokia E51 and E61 Series smart phones. Meru’s coordinated, intelligent Access Points deliver a certified Wi-Fi infrastructure that handles toll-quality wireless VoIP and high-capacity data on a single infrastructure. Avaya’s 8710 provides Anthony Marano Company with a highly flexible PBX solution that meets a variety of telephony needs, including high call capacity. Nokia’s E Series are the latest in smart phone technology with dual-mode cellular and Wi-Fi capability, and advanced features such as email access.

Deployment of ShoreTel Mobility and tying in his eFMC ecosystem went smoothly, according to Mr. Nowak.

“Implementation of ShoreTel Mobility was very straight forward, including configuration with our Avaya PBX,” he said. “ShoreTel Mobility’s documentation is good, and we are looking forward to tying everything into our LDAP server. On the client side, roll out was very intuitive. Training for the users took about two minutes, and it was mostly introducing users to all the key features of the Nokia phone.”

The Results

Now with ShoreTel Mobility deployed, Anthony Marano Company enables continuous high-quality voice coverage for its mobile staff to receive and fulfill orders throughout the day.

“We are more successful and make more money when our buyers and sales staff get calls the first time around, and calls don’t land in voicemail.” Mr. Nowak said. “ShoreTel Mobility gives us a competitive advantage because we now have the ability to respond quickly.”

As an example, Nowak recalled hearing of one user’s experience.

“We do millions of dollars of business transactions all day via the phone; no paperwork no contracts,” said Anton J. Marano, tomato sales manager. “If I’m not on the phone we’re not making money. ShoreTel Mobility gives us universal coverage and reliable and efficient high-speed access to the PBX, which is critical to our company.”

Mr. Nowak added that he can sum up the benefits of his ShoreTel Mobility deployment in two words: Less Voicemail.

“Voicemail is the biggest productivity killer for us,” he said. “With less voicemail we are more productive in our mobile environment, and that’s a big deal for us.”

“We are also realizing the benefits of using a smart phone with ShoreTel Mobility, not an in-building phone like Spectralink which has limited intelligence and lacks functionality, such as allowing attachments in mobile email,” he said. “The Nokia phone is a best-of-breed phone that is more robust than in-building phones like Spectralink, and is a wireless phone that is superior to a desk phone in the functionality and mobility it gives us.”

Over the long haul, Mr. Nowak looks forward to measuring the productivity and sales improvements due to ShoreTel Mobility.

“To measure the ultimate success of this project, we will be looking at how our company unit volume increases,” he said. “We want to see ShoreTel Mobility help us increase our package count without any changes to our sales staff. On the productivity side, nothing can enhance our staff’s productivity better than voice quality. Other than perhaps giving everyone a PC, ShoreTel Mobility is the second most important technology to us for enhancing productivity.”

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Chris Nowak
CTO
Anthony Marano Company
About ShoreTel

ShoreTel is the provider of brilliantly simple Unified Communication (UC) solutions based on its award-winning IP business phone system. We offer organizations of all sizes integrated, voice, video, data, and mobile communications on an open, distributed IP architecture that helps significantly reduce the complexity and costs typically associated with other solutions. The feature-rich ShoreTel UC system offers the lowest total cost of ownership (TCO) and the highest customer satisfaction in the industry, in part because it is easy to deploy, manage, scale and use. Increasingly, companies around the world are finding a competitive edge by replacing business-as-usual with new thinking, and choosing ShoreTel to handle their integrated business communication. ShoreTel is based in Sunnyvale, California, and has regional offices and partners worldwide. For more information, visit shoretel.com.