Automation yields better insight and consistency for telecom reseller

We live in an increasingly connected world, with the number of devices that we use to communicate and improve our quality of life growing on a seemingly daily basis. Communications devices keep us healthy, keep us safe, provide necessary news and information, and keep us in contact with friends and loved ones. But all of those communication tools need a reliable network on which to transmit data.

As communications networks continue to expand, the demand for network equipment has surged. While some carriers choose to purchase and install new telecom equipment, others opt for used and refurbished equipment that can provide similar quality at a much more reasonable cost.

CellSite Solutions is a leading provider of used telecom equipment, products and services. The company purchases used and surplus shelters that house telecommunications equipment for towers from a variety of sources, refurbishes them and then resells them at a fraction of the cost of new hardware. In addition to cost savings, CellSite is typically able to offer a quicker response time for customers who don't want to wait for brand new shelters.

With an extensive service portfolio spanning the complete equipment life cycle from sales to installation to decommission, CellSite has become very successful. In fact, the company is in the process of transitioning to a new headquarters in Cedar Rapids, Iowa, with over three times the space for office personnel and equipment refurbishing.

JEFF GLEASON
Chief Technology Officer
CellSite
Targeting process improvements to meet growth demands

With the success the company has continued to experience, CellSite realized it needed to scale and enhance its processes for continued prosperity. In order to keep up with growth and demand, the company decided it needed to make an investment in technology. CellSite began to develop a technology strategy focused on automating processes, finding scalability and taking advantage of opportunities for cost savings.

“We want to have more visibility into what’s happening within the company—where our projects are, where our people are and how we are resource planning,” said Jeff Gleason, Chief Technology Officer, CellSite. “That’s what is driving us at this point.”

One major concern for CellSite was its manual site audit process. The company receives a list of shelters that companies want to sell—towers that are no longer used for a variety of reasons. CellSite then determines which ones it may be able to refurbish and sell.

However, initially picking up the shelters CellSite purchases for resale is no easy task. Much of the equipment is in remote areas and in difficult terrain, and the company brings in heavy-duty cranes to pick up the concrete shelters that can weigh between 50,000–70,000 pounds. Prior to that process, CellSite utilizes a site audit function, where auditors travel to each of the shelters the company is interested in with an iPad to record several key details, including the condition of the shelter and the ease of access to decommission the site.

The site visits can be unpredictable. In some cases, the shelters may have been damaged or destroyed due to weather. Teams have also encountered animals or endangered birds that have occupied equipment, thereby preventing movement, as well as other people that may have moved into shelters. The company must determine whether a crane can safely reach a shelter and pick it up, and whether it is worth the effort.

Gathering reliable data from the process is critical to help CellSite match products with customer requirements, keep up with inventory and perform work-in-progress accounting. Ultimately, the accuracy of the site audits has a direct correlation to CellSite’s return on investment.

“We send people out to do these audits all over the country,” commented Gleason. “And, as you can imagine, it’s a fairly expensive process to go look at all of this equipment and collect information. And part of our issue is that it wasn’t always being done consistently.”

Site auditors used a manual process with a spreadsheet template to input information on available equipment. Pick lists were utilized to show the condition of shelters, detail features and identify areas where repairs need to be made. Unfortunately, employees were not filling out all of the fields consistently, and often using different terms in different areas of the spreadsheet.

In addition, several pictures must be taken to evaluate the site and the shelter to aid in making purchase decisions—including the door, roof, floor and exterior areas. Those photos are not only used for auditing purposes, but for marketing material when the shelters are sold. Those photos were also not being taken and uploaded in a consistent manner.

Introducing automation to the site audit process

The audit process is essential to CellSite’s operations, so it sought an automated technology solution to make the inputs more uniform and efficient. However, any platform would need to be intuitive for people with a wide range of technology capabilities and available from a mobile device on which information could either be entered immediately or afterward if cellular service isn’t available on-site.

“We need a dedicated, purpose-built solution that is very task-focused, very simple and doesn’t have an excess number of fields,” said Gleason. “It needs to be focused on doing a site audit and that’s it—and it needs to do it very well and very consistently.”

While CellSite knew what it wanted a potential solution to look like, it needed a partner to help build it out and integrate it with the existing technology framework.

“I wanted to find somebody that had experience with our enterprise resource planning system, as well as with Microsoft Power Apps,” said Gleason. “I wanted some guidance on whether I was making the right decision on the Power Apps platform and how to address any issues that we might run into.”

CellSite chose to work with RSM US LLP on the site audit solution based on a positive experience working together on a successful NetSuite ERP implementation, as well as the firm’s extensive experience with Microsoft applications. With RSM’s knowledge of both the technology in place and the planned improvements, the necessary integrations and inventory items could be created to optimize the functionality of the new site audit tool.

Initially, CellSite and RSM had an on-site workshop to brainstorm about needs and opportunities. RSM developed a proof of concept to walk through how a solution might work, validating some of the ideas from CellSite leadership and ironing out which fields and functions would be included in the Power Apps platform. The exercise also confirmed key details including how to connect data and ensure proper authentication within the system.

Based on those discussions, RSM developed a more formulaic, systematic approach to the new site audit application. It includes a detailed set of pictures that auditors must take before the process is complete, giving them clear direction and a better frame of reference.

Previously, when auditors took photos, they were stored on the device with arbitrary names. Later they would pull the pictures up and try to figure out what they represented before manually uploading them. The new application is much more
streamlined, actually directing users to take a picture of a specific feature—such as an access road, door, ceiling or data plate—and immediately uploading it into a specific predefined slot in SharePoint behind the scenes.

The more defined platform helps to create a more effective vision of the equipment throughout its life cycle with CellSite. It presents a consistent view of the shelter from when the audit is completed and it is decommissioned to when it is actually picked up and brought back for refurbishing and then delivered to a customer. Those comparisons are now much quicker and easier.

Now that the new site audit solution is in place, CellSite is getting much more effective and consistent data collection. The framework enables the company to have better analytics, with insights into what type of features customers are looking for from shelters, what is selling better and what really drives value for the business.

Perhaps most importantly, the tool significantly increases efficiency for CellSite’s site auditors. The company currently performs roughly 400 audits per quarter, so performing the process quickly and as accurately as possible is of critical importance.

“It’s all about automating as much as we can, simplifying as much as we can, making the process as efficient as we can, and then collecting as much data as we can about these sites,” said Gleason. “It has really helped us improve our analytics and our decision-making, as well as our visibility.”

In addition to these enhancements, RSM developed the site audit application so CellSite could make additional improvements to the platform in-house. For example, the company can very easily change a formula or calculation if needed, or add additional fields to the platform without requiring a programmer to come in and make those adjustments.

“That was a big driver for me,” said Gleason. “I wanted something that I could build over time in an iterative fashion. Ongoing maintenance and ongoing development going forward is a big reason why we chose this platform.”

The road ahead

CellSite and RSM have worked in concert to create an intuitive solution to enhance the efficiency and consistency of the site audit process.

“I was really pleased with the expertise that the RSM team brought to the table in helping me think through everything before committing to the Power Apps platform,” said Gleason. “There were some challenges along the way, and I needed RSM to work through those and help me figure out how to make some things happen—and they did.”

While the auditing application has been a major process improvement, more transformational opportunities may be on the horizon. CellSite and RSM are now working on the next progression of the automation project, which is to take the audit information and translate it into actual inventory items within NetSuite. This could immediately solve inventory accuracy issues that were directly tied to the manual site audit process.

With the increasing importance of the communications infrastructure across the country, and a focus on implementing ongoing technology improvements to strengthen speed and accuracy in key processes, CellSite is well positioned for further success in a growing industry.