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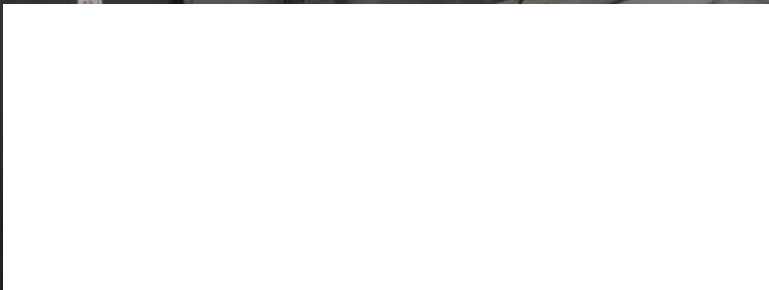
# Integrated Solutions

## OPTIMIZE FIELD WORKERS, SERVICE & ASSETS

# Service Management Cut Costs Without Cutting Revenue

Since installing a new service management software solution, this HVAC company has grown sales by \$20 million while reducing labor 15%.

Bob Bull, owner, CMS Mechanical



# SERVICE MANAGEMENT: CUT COSTS WITHOUT CUTTING REVENUE

Since installing a new service management solution, this HVAC company has grown sales by \$20 million, while reducing labor 15%.

by Sarah Howland

Can you imagine the many challenges you'd face managing a mobile field service workforce that receives its daily schedules via fax, takes handwritten notes on physical log books while at customer sites, and calls in to dispatch for historical customer data? Chances are these manual tasks seem obsolete to those of us who are accustomed to the convenience of today's technology and the real-time access to information it allows. However, in reality, there are a large number of service organizations today that are still using such manual processes in the field. According to Aberdeen Group, only 23% of firms in the service industry have a mobile field service extension to their service management system. This means that while these companies may be managing data on the back end, there is no real-time data communication with the workers in the field. With all of the technology options available today to provide real-time data to mobile workers and automate these manual processes, why aren't more service companies taking advantage of them? In Aberdeen Group's 2009 *Trends In Mobile Field Service* survey, 31% of companies listed limited perceived value/lack of ROI as a challenge to mobile solution adoption. While this perception may very well exist within

the service industry, CMS Mechanical is one company that proves that perception to be entirely inaccurate.

CMS Mechanical is a commercial and industrial mechanical services company that specializes in the repair and maintenance of air conditioning, heating, refrigeration, and electrical equipment. The company began in 1993 with a single office in Melbourne, FL, servicing only the central Florida area. Today, with \$50 million in annual revenue, CMS has grown to be the largest independently owned service business in the United States. CMS now has 275 field technicians that service more than 66,000 sites across 22 states in the United States, including many national customers with multiple locations. Each of CMS' field technicians works from home and is dispatched to jobs by one of five central offices.

## **Business Expansion Compounds Scheduling, Dispatching Needs**

When CMS began with one office in Florida, the company used very basic service management software at the office primarily for scheduling its field technicians. "It was basically an electronic scheduling whiteboard for dispatchers to fill in when service calls came in," says Bob Bull, owner of CMS Mechanical. As customers called in with service



Bob Bull, owner of CMS Mechanical, spearheaded the installation of a service management software solution, along with BlackBerry smartphones, to eliminate manual processes previously used in the company's service operations.

requests, the dispatchers consulted the electronic whiteboard to determine which technician was available, scheduled an available technician for the call, and faxed a daily schedule to each field technician every morning. When CMS' business began expanding outside of the central Florida area, the company invested in slightly more updated software that enabled dispatchers to enter service call details and save customer history in addition to scheduling. Nonetheless, technicians had to take handwritten notes at each job and call in to dispatch after to relay the notes for this history to be maintained. Manual logs also were physically hung on the equipment at each customer site so that technicians could write notes on each job to maintain a history of work done on-site. "Techs wrote some brief notes on the log about what had been done on-site so that the next tech to visit that customer had some point of reference. If the tech needed additional information, they'd have to call dispatch to



Bob Bull, CMS Mechanical

have them look up the customer in the system and provide more detail," says Bull. "These calls back and forth were extremely time-consuming for both the technicians and the dispatch workers." Besides the time-consuming manual efforts and lack of real-time visibility that the field technicians were experiencing with the current processes, as CMS' business continued to grow, the service management software presented a couple of bigger-picture problems that forced the company to seek out a new service management solution. "The software we'd been using was a flat-file system, so it only stored a certain amount of data at a time. This meant that we had to regularly dump history onto a disk to clear the system and be able to continue operating," says Bull. "Furthermore, the flat-file system was a proprietary software that couldn't be accessed by remote locations. This became a very big issue as business continued to grow, because there was no ability to share data among multiple locations when we began to expand." After expanding to 14 states from its Melbourne location, CMS opened a second office in Roanoke, VA, and was forced to install a completely separate database in the Virginia office. Users of the service management system in Florida had no visibility into the Virginia system, and vice versa, meaning no data was shared among the offices — including customer history, field technician availability, and financial data.

### Real-Time Visibility Key To Service Management

In 2005, Bull made the decision to find a service management solution that would enable CMS to continue expanding its business while eliminating many of the manual processes that existed in the current structure. "Newer technology simply transformed from an option to a necessity," he says. "To be able to operate efficiently and meet customer demand, I knew we were going to need a new solution." The core characteristics Bull wanted from a service management platform were the ability to share data and communicate with field technicians in real time, a more advanced dispatching component that field technicians could interact with from the field, no restraints on the amount of customer history that could be stored, and the capability for remote offices to access and share data across one system.

Bull spent a year researching various service manage-

"Newer technology simply transformed from an option to a necessity. To be able to operate efficiently and meet customer demand, I knew we were going to need a new solution."

ment solutions and evaluating different vendors by bringing in about a dozen for interviews and demos. After landing on one vendor and beginning development of the software, Bull realized he'd made a mistake. "About three months into the project, I realized the company we'd chosen to go with wasn't going to work out. When they did the demo and I asked about customizations, the answer was 'no problem.' When we started the actual work, the answer became 'we can't do that,'" he says. "We realized there was a tremendous amount of untruths in their sales process and realized things they'd told us they could do during demo they actually couldn't." Bull's advice for companies selecting a vendor for new technology? Don't simply take "yes" for an answer — make the company validate it has done or can do what you're asking.

### Find A Vendor To Customize Software To Your Specifications

At this point, Bull returned to the shortlist of vendors he'd narrowed his search to and decided to install the Service Management-Plus Enterprise (SM-Plus) service management solution from Single Source Systems, Inc. SM-Plus is a customizable, end-to-end service management solution that integrates modules for scheduling and dispatch, work order processing, inventory manage-

ment, and accounts receivables/payables into a single system connected to a common database that can be accessed by multiple office locations, as well as by mobile workers and customers via a Web interface. After the negative experience with the first vendor CMS chose, how did Bull know he wasn't making the same mistake? "The owner of Single Source actually came to Florida three different times to walk through the demo with me, along with programmers. When I'd ask him to customize the solution in a certain way, he'd show me on the spot how it could be done," says Bull. "They were willing to build the product to work the unique way I wanted it to and were willing to take the time to show me that they could actually do it." For instance, some customers require a PO (purchase order) to be filled out before a work order is issued. Bull wanted the system to recognize which customers had this requirement and not let CMS staff enter a work order unless the PO had been issued. Further, Bull requested that the system recognize if the field wasn't completed correctly and send an alert to the employee. For instance, if a worker enters a period to skip the step and move on, Bull wanted a flag to come up to tell the employee to report to HR and get their pink slip. "While the owner was a bit taken aback by this request and asked me if I was serious, once he realized I was, he was happy to enter the rule into the system," notes Bull. "While some of the larger vendors I interviewed looked at me like I'd lost my mind when I made this request, Single Source didn't. They were willing to meet any level of customization I asked for, as long as I was willing to pay for it."

Customization and development of SM-Plus to meet CMS' specific guidelines, migration of data from the old system to the new system, and the creation of the Web interface for customers and employees took about a year. CMS formed a team that included Bull, two IT employees, the CFO, and a representative from the A/R and A/P department to determine which rules (like the PO example above) CMS wanted to include. According to Bull, the CMS team created a spreadsheet with about 400 customized business rules they wanted to add to SM-Plus. Single Source went to work on adding these customizations to the SM-Plus solution, and once a week a module was uploaded to a server at CMS' Melbourne headquarters for the team to test. The CMS team spent two to three days per week using and testing each module to make sure everything was working the way they wanted it to and to determine if there were any additions/changes to make. Once all the modules were completed, Single Source began migrating the data from CMS' old system, which took about 60 days. Four weeks before going live, CMS began holding half-day, classroom-style training sessions at each office that alternated among dispatchers, A/R and A/P employees, finance employees, HR employees, and service managers who would be using the system. "When the solution was ready to go, there was talk

## Service Management Software Provides KPIs, Daily Reporting

When CMS Mechanical, a commercial and industrial mechanical services company, sought a service management solution, its prime objective was eliminating paper-based processes and increasing efficiencies. However, the company also wanted to increase visibility across the organization. CMS' business is entirely service-driven, which means customer satisfaction and retention are vital to the success of the company. Today, CMS maintains a 98.5% customer retention rate. Bob Bull, owner of CMS



SM-Plus service management software from Single Source Systems enables real-time, two-way communication between workers in the field and dispatch.

Mechanical, credits that rate, in part, to the visibility into his business the SM-Plus service management solution from Single Source Systems provides. SM-Plus integrates modules for scheduling and dispatch, work order processing, inventory management, and accounts receivables/payables into a single system and

enables CMS to gauge performance in each of these areas by setting KPIs (key performance indicators).

During customization of the SM-Plus solution, CMS set performance goals for each area of its business that the software monitors. Daily reports are delivered via email to management and technicians that highlight CMS' performance measured against the KPIs, including revenue and costs by division and productivity per technician. "Every day, I receive about 20 reports in my in-box, all concise with information on sales, A/R, A/P, and cash flow," says Bull. "This makes it simple for me to have an at-a-glance view of how the entire company is performing, which was impossible before with the disparate databases and lack of shared data." The exception management capabilities of the system have also proved a valuable feature the company's previous service management solution didn't provide. For example, technicians are supposed to have quotes to customers within 24 hours of being on-site. If that doesn't happen, an escalation alert is sent to the technician and his boss. If the issue isn't then resolved within 24 hours, Bull himself receives an alert. "This enables me to ensure small issues don't escalate into big problems and unhappy customers," explains Bull. For more information on Single Source Systems, visit [www.singlesrc.com](http://www.singlesrc.com).

about a phased implementation module-by-module,” says Bull, “but we had tested the solution so much that I felt we could go live all at once, which ended up working out just fine.” Single Source installed the completed solution over a weekend, and three Single Source employees stayed throughout the first week to make sure the transition went smoothly and to be on hand should any issues arise.

### Help Techs Conquer The Transition To Mobile Computing

With the installation of SM-Plus complete and functional throughout the five CMS locations, the next step was for CMS to roll out the solution to its field technicians. CMS chose BlackBerry Curve 8350i smartphones and Dell Mini netbooks for technicians to use in the field to access the SM-Plus Web portal. “Our field technicians are highly mobile, often up on roofs and navigating small spaces,” says Bull. “The BlackBerry is a device they can take with them wherever they go, provide one-click updates on job progress, and holster when they’re not using it. The Dell Mini enables the techs to perform more involved tasks, such as invoicing, entering inventory, and entering job notes, with a larger screen and bigger keyboard.” CMS introduced the BlackBerrys and Dell Minis to the technicians, along with the SM-Plus Web portal, over the next three months during weekly service meetings. “While the in-office training for SM-Plus really wasn’t a rigorous transition, this was a big change for the guys in the field,” says Bull. “Their average ages are 40 to 45, and they have been using the same manual processes for years. Asking them to switch to a BlackBerry and a Web portal is quite a big step.” Because of this, CMS wanted to train the field techs in small groups of no more than 20 techs at a time and spend ample time with them answering questions.

Once all of the field technicians had been trained on SM-Plus and were using the solution, CMS began to recognize benefits quite rapidly. SM-Plus enables real-time, two-way communication between dispatch and field techs (as well as among all office locations), which provides a number of improvements over the previous system. First, dispatch workers have more accurate information regarding technician availability and access to customer history data and therefore are able to schedule more efficiently. Also, rather than faxing a schedule to each technician every morning, field techs are able to access their daily schedules on the SM-Plus Web portal and then provide real-time status updates throughout the day so dispatch is aware of their progression. Field technicians have access to historical customer data and can input new data through the Web portal, eliminating the

need for handwritten notes, manual logs kept on equipment at customer sites, and time-consuming phone calls back and forth between techs and dispatch. “The ability for each employee, both in the office and in the field, to have access to historical customer data is crucial, because to your customers, you’re only as good as your last job,” says Bull. “Sending techs on-site and expecting them to go off some handwritten notes jotted down on a log or spend 20 minutes on the phone with dispatch while on-site at a customer location to gather data is setting yourself up for failure in terms of customer service — customers today are sophisticated and have higher expectations than that.”

As a result of the process improvements SM-Plus has allowed, CMS has been able to increase revenue by \$20 million dollars since installation, while reducing labor by 15%. The solution hasn’t impacted the number of field technicians CMS employs, but through more efficient scheduling and dispatching has increased the number of field technicians each dispatcher can manage by nearly 50% and has enabled CMS to reduce the number of employees in the payables department by 60% through streamlined billing. “The way the solution has streamlined our processes and allowed us to reduce labor has translated to our overhead being 5 to 10 points lower than most of our competitors, which helps us remain competitive with pricing,” notes Bull. CMS is currently working with Single Source to integrate GPS data from black-box units in each field tech’s vehicle with the SM-Plus system to further improve visibility into daily activities of the remote workers and expects to have this completed by summer.

Each service business is unique in its individual needs — I’m sure Bull’s request for a “gather your pink slip” flag to appear when a PO is ignored isn’t a request Single Source had heard before. And each business varies in the areas it struggles with from an efficiency standpoint — some with handwritten logs and others with manual scheduling methods. However, no matter the individual needs and struggles of your business, a service management solution customized to meet those needs can help you to increase efficiencies in the field. Measurable results like those CMS has experienced illustrate that fact and should put any notions of “limited perceived value” to rest. •



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