

By FRANK RACZON, Senior Editor

Costs, Tech Shortages, Data Drive Outsourcing Decisions

Fleet managers making the call on outsourcing also must evaluate vendors, use leverage on deals

Sixth in a series, this installment of The Management Challenge examines the outsourcing decision within the "Shop and Yard Operations" segment of the management hexagon.

Though outsourcing is usually a dirty word when it comes to the U.S. economy, it can be a very useful tool for an equipment manager when done correctly, saving money—and often more—for an operation.

Dan Pitt, CEM, on-road fleet manager for Mulzer Crushed Stone in Tell City, Ind., outsources maintenance for his dump trucks and quad axles, and also teaches classes on the subject over the entire universe of iron for AEMP's Professional Development Institute.

What outsourcing can do

Pitt says outsourcing done properly should reduce costs, increase quality, reduce assets owned, reduce liabilities and risk, and reduce full-time employees. For the good of your operation, you'll want to be careful about that last part.

"It can make or break you," he says. "If you're able to do it through normal attrition such as retirements or not replacing employees who've left, you'll have a better chance of success and lower the amount of employee resistance and fear."

Pitt shared an example from his own experience. "With our PMs (preventive maintenance), like oil changes, we used to take pride in doing everything in-house, but we realized we don't want units pulled in the daytime when they should be out hauling material," he says.

The first solution was going to a night-shift crew; three mechanics driving to Mulzer's various depots to perform service. "We did that for several years, but when you add up the cost of a three-man crew and their

service trips, which would be 3 hours of the shift spent driving to destinations just to work on a truck, it became costly," Pitt says.

Pitt then realized there were dealers just five miles from two Mulzer depots, so he asked them to have their mechanics adjust their hours, and work a little later. "The dealer also gave us a courtesy vehicle," Pitt says. "A driver could drop his truck at the dealer, drive the car back to our shop, and the next morning, take the car back to pick up the truck."

As a result, Mulzer incurred no downtime during the day to do its PMs, and eliminated three hours a night on the road for its mechanics.

"That also means eliminating the liability of having a service truck on the road at night, plus the cost of diesel fuel," Pitt says.

"And we did all this without having to terminate anyone—of the guys we had on the night shift, one retired, and two became full technicians for us at our quarries. You must be careful with reducing full-time employees; open communication between management and employees is key."

Employees are naturally going to exhibit fear and skepticism when outsourcing is considered or started. Pointing out technician shortages and allowing nature (attrition) to run its course can help. Remote job sites and depots also help explain the decision.

"We have technician shortages in our area and our equipment is often in remote locations," Pitt says, "so using vendors to take the overload has been very helpful to us."

Pitt's employees see that. They see a lot of things, it turns out.

"When you outsource, you're going to have a lot of eyes on you," Pitt says. "When we first did it, our drivers would point out vendor mistakes. Sometimes you'll find you get better quality service because your employees will hold that vendor's feet to the fire."

Often, the savings are worth it. Pitt, whose com-



Shop and
Yard Operations



Maintenance is one of the most commonly outsourced activities for fleets. Many equipment dealers will raise the possibility of maintenance contracts at purchase.

pany outsources PMs for his over-the-road trucks, and oil changes, engine work, hydraulic cylinder rebuilds, starters and alternators on the off-road side, found savings by examining even the most routine activities.

“For the company pickups, we used to do the oil changes ourselves until we realized we were driving our pickups past two or three ‘quickie lubes’ on the way to our garage, so there were extra mileage costs involved there,” Pitt says. Mulzer arranged to have the oil changes done by the local oil-change businesses and realized savings.

A hidden plus

A hidden benefit to outsourcing engine work is simplifying what employees need to know. “Before, when we were doing our own work, we had five different engine manufacturers and five different engine types, so our technicians had to spend time to be up to speed on all of them,” Pitt says.

“Plus, we would have to keep parts in-house for all five. Now, with outsourcing these repairs to a vendor and standardizing our trucks to one brand instead of five, we have no need to keep all those parts, and technicians can concentrate on learning about only one engine instead.”

Outsourcing has also helped free Mulzer to obtain

competitive bids on their haul trucks, according to Pitt. In its last round of purchasing, Mulzer included negotiations for PMs on the units, giving the company more leverage.

“So, we don’t have to carry parts and filters for five different types of vehicles, and we are a lot more competitive ourselves when we can get five or six quotes from different dealers,” Pitt says.

The 95-percent conversion

When Ben Tucker, CEM, equipment manager for Barriere Construction, a heavy, highway and civil contractor based in Belle Chasse, La., took a look at his total maintenance spend in 2000, he decided it was time for a change.

“We had a maintenance facility then, we were doing about \$70 million worth of work, and we had 170 to 180 pieces of off-road, and maybe 200 on-road, from pickups to class 8 vehicles,” Tucker says. “We looked at maintenance spend internally, and said this is kind of crazy—with a fleet value of \$18 million we were spending over \$5 million in maintenance between people and everything else.

“Plus, there are training costs; trying to keep people

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up to speed on Tier 4, trying to train someone on a mixed fleet between electronics, GPS and grade controls, you can't keep up with it," he says.

Costs are one thing; the liability of warranty work is quite another.

"When we had to rebuild something, it had the liability of warranty on it," Tucker says. "If you're rebuilding an engine or transmission internally, the burden falls on you—if you miss one bolt, you have to go back into it and do the whole damn thing. If a vendor does it, and something comes apart during the work, you've already paid for it. That's a cost I don't incur."

Tucker and Barriere weighed all these factors and decided to outsource maintenance—some 95 percent of it. "I still keep a welder!" he says.

After evaluating vendors, he set up a master service agreement with his dealer, and more. "You make sure their insurance is right, make sure emergency service can be there in two hours, that PMs can't be overdue, and if they are, the cost's on them," Tucker says.

"My maintenance cost as a percent of company revenue is about 1.5 percent. There's no way we'd be where we are today without outsourcing."

— Ben Tucker, CEM, equipment manager, Barriere Construction



"If there's work required, it has to be done in 10 days. We also try to set pricing on major wear-item rebuilds like dozer undercarriages, and the PM pricing is all set based on PM type, including oil and travel, too," he says.

The non-pricing requirements are part of 27 key performance indicators that Tucker tracks monthly. There are also weekly repair schedules that he gives the dealers a week ahead of time so they can have an overview of the parts needed, as well as the times machines are available and their locations.

"They have GPS access to all my equipment, too," Tucker says. "Any time we call them or interrupt [the dealer's plans], we call that an 'emergency'—when we're changing their scheduling and zoning pattern. We strive to minimize mechanic windshield time so a

mechanic has to travel once, not twice."

Tucker's dealer also has access to his dispatching software. As for the dealer calling up machine performance data via telematics, he says it happens occasionally, but the practice isn't where it needs to be.

Still, there's been huge savings. Today, while doing \$200 million in revenue, Tucker's total maintenance costs are less than \$3 million a year.

"It's all about uptime," he says. "We can't afford to have breakdowns. Our emergency breakdown rate was about 50 to 60 percent back when we were reactive. Now, we're lower than 5 percent, and my maintenance cost as a percent of company revenue is about 1.5 percent. I track it closely and I don't target myself within my industry, I target myself with the best of the best," Tucker says. "Almost world-class."

Outsourcing isn't just for private fleets like Barriere's. More public fleets are starting to embrace outsourcing, particularly in these days of depleted tax revenues and deficit crises.

"Counties are wanting to bid machines with total maintenance contracts included," says John Ostrander, vice president of product support for GS Equipment, Tampa, Fla. "They just want to make payments and don't want to have to touch the machine. They're also outsourcing parts sales and procurement."

An outsourced parts operation might see NAPA, or another entity such as an equipment dealer, establishing a satellite location in the county's shop with personnel and a parts inventory. "The goal is to get the part at the cheapest price," Ostrander says.

Ostrander, who represents a number of brands including Kawasaki loaders, also says larger contractors that usually do their own maintenance are exploring outsourcing maintenance operations, but aren't ready to commit to an equipment dealer. One possible reason is that cars and trucks from a contractor's fleet might not easily fit into a maintenance program designed and executed by an iron dealer.

What shouldn't equipment managers—public or private—outsource?

"AEMP teaches that fleet-management decisions such as what types of equipment to deploy and where you want them should stay in-house," Mulzer's Pitt says.

"Vendors simply aren't as familiar as you are. We

recommend that you never outsource overall fleet and shop management, risk and liability management, and overall administration management.”

The Tier 4 effect

Every fleet and equipment owner will eventually have to deal with Tier 4, which is causing its own brand of outsourcing.

On the on-road hauling side, it's a key consideration for Pitt right now. Off-road managers should pay attention, though, as more Tier 4-Interim and Tier 4-Final solutions are using SCR technology.

“Cost is the main factor, but a lot of it with the on-road fleet involves engine work on the new SCR systems for Tier 4—just to be able to keep my on-road technicians up to date, they'd be in the classroom more than they'd be out working,” Pitt says.

“Also, we'd have to buy tools for all that, the diagnostic equipment, and then there are the DPF filters you have to take out every couple hundred thousand miles to clean. All of this requires several hundred thousand dollars of investment, and we just wouldn't get the utilization out of it.”

It may be better to use an outside firm that's already

Telematics As an Outsourcing Catalyst

Telematics is another area contributing to outsourcing decisions, as a catalyst that can make the process and transition easier.

Michael Miller, president of Superior Oil Field Services, Greeley, Colo., has a 21-piece fleet of scrapers, loaders, graders, dozers, and compaction equipment, and outsources trucking for their aggregate operations and maintenance on the graders and loaders, forging maintenance agreements with their local dealer, Colorado Machinery, based in Fort Collins, Colo.

Superior is letting the JDLINK telematics system on its John Deere graders and loaders help coordinate maintenance and spot problems before they happen.

“We have equipment spread out over three states,” Miller says. “So it's difficult to bring machines into our shop. The telematics allows our dealer to track hours and usage of the equipment, and makes it so we can get service done in a timely manner. Our dealer notifies us when service is due, and rather than having to tie up our machine traveling, it's more reliable for dealers to do it for us in the field.”

Through Deere's WorkSight, which the company calls an integrated suite of technology solutions for business optimization consisting of four technologies (JDLINK machine monitoring system; Fleet Care proactive machine health program; the Service Advisor Remote function that allows Deere dealers to connect



remotely to Deere machines; grade control; and payload weighing), Superior is also using JDLINK's alerts function.

Alerts contact both Miller and the dealer when service is required, or if there's an issue with a machine. The Fleet Care component ensures the dealer proactively contacts Miller with a problem, and possible solution, before anything happens.

“WorkSight is always in play,” says Miles Kaplanides, Colorado Machinery's store manager, “and with Service Advisor Remote, we are plugging in remotely to correct a problem; the

capability is already in there. We don't have to put the machine down to address a problem.”

Service Advisor Remote can also update software without incurring a technician visit.

“I'm an old geezer and I see all the new technology, but it's very difficult to use everything that comes out,” Miller says. “I had the telematics for months, wasn't using it, then kicked myself for not doing it earlier. Staff-wise, it's hard to get people interested, but when you do, it's worthwhile.”

The same might be said for outsourcing as a whole.

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made such investments. Just as equipment managers are constantly gauging asset utilization rates for their iron, it's a good idea to consider utilization rates for service facilities, tools and parts when making an outsourcing decision.

Pitt is also buying extended warranties for trucks with SCR systems, citing dealer expertise. "Urea's an unknown entity for now, and it makes sense to have dealers working on those systems," he says.

Steve Dolin, a manager with Kanawha Stone Co., Nitro, W.Va., doesn't currently outsource, but sees a possible scenario using a dealer's service trucks.

"There might be a need for special Tier 4 oils a contractor might not carry on his own lube truck," Dolin says. "But that would be on a case-by-case basis—it wouldn't warrant a [maintenance] contract."

Getting started

"As a first step, go to someone who has experience and sit down with them to find out what did and didn't work, and any pitfalls to look out for," Pitt says. "Bench-

bosses on board and getting key information from the executive suite.

"In some businesses, the upper management doesn't want to let go of the cost information needed to make decisions, so a lot of smaller companies may not know the true cost of what they're doing," Pitt says. "Owners must give you all the information so you can make correct decisions. But with bosses, if you have a track record of success, they'll back you up. They tend to get more open as you show them more successes."

Superior Oil Field Service's Michael Miller first looked at outsourcing from the president's seat. "Initially, when I looked at it, my thought was 'that's expensive, I can do better than that,'" Miller says. "But when I started calculating what it was costing me in time, and questioning whether my guys were actually doing all the recommended services, I decided to give it a try."

Miller also stresses the warranties involved. "Having the dealer do maintenance lessens my exposure, and there are no unnecessary repairs," he says.

Miller's equipment dealer, Colorado Machinery's Miles Kaplanides, raises another point relevant to the decision process. "In five years, say Mike wants to trade machines in. He's probably going to get a higher trade-in number because we know the condition of the machine from Day 1—with someone who does their own maintenance, it might not be the same," he says.

In addition, Kaplanides breaks down the cost of maintenance agreements, showing the cost of a maintenance agreement by the hour, instead of as an add-on. "That's where it makes the most sense for customers in making the decision," he says.

Barriere Construction's Tucker recommends starting with basic lists. "Make a checklist of everything that you want, and what you don't like about what you're currently doing," he says. "From that point, get your financial people and your IT people involved with that checklist and come up with the pros and cons and some targets. Then do comparisons between vendors that you might work with—can they do what you want done?"

Tucker is someone who found a vendor that could, to the tune of millions of dollars in savings over 12 years. "There's no way we'd be where we are today without outsourcing." ☞

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— Dan Pitt, CEM, on-road fleet manager, Mulzer Crushed Stone



mark with someone who has done it and had success with it. Also, you need to look at every process and figure out the cost of that process, and determine whether or not there's a more efficient method out there provided by someone else.

"Avoid asset ownership and activity ownership where it makes sense and where you can apply labor-saving services and labor-saving practices," Pitt continues.

"Staff through the valleys and outsource through the peaks. This way, you're keeping enough people to run your core, everyday business, but you also have the flexibility to rent machines, hire temporary employees, or outsource to a vendor—so you don't have excess equipment, capital or employees when business comes back to normal," he says.

Pitt also stresses the importance of getting the