

# HARD HAT NEWS

SERVING: Contractors for Excavating • Construction Demolition • Underground Utility Construction  
• Land Clearing/Landscaping • Paving and Bridge Construction

Don't let your equipment weigh you down



**Dave Bennett**

**by Dave Bennett**

Effectively managing heavy equipment can make the difference between a profitable company and an unprofitable one. Successful construction companies are always looking for ways to increase profits, reduce maintenance and operating expenses, optimize utilization and minimize downtime. This can be achieved through better equipment asset management.

Equipment Asset Management provides information to make decisions about:

- When to repair a piece of equipment as opposed to replacing it;
- Which predictive maintenance programs to implement and when to do them;
- Adjusting fleet size through rental vs. ownership choices to meet changing project requirements.

In practical terms, this means obtaining the highest productivity possible from the equipment, at the lowest cost; and balancing when to dispose of the equipment in order to obtain the highest resale value and the lowest lifetime cost per hour.

According to Case Equipment's 2009 Economic Outlook, "One in five contractors will be fighting for volume in 'intensely competitive' markets this year, and an additional 55 percent in 'very competitive' markets." The investment a heavy construction company makes in equipment is substantial. The cost of owning and operating the fleet is frequently larger than any other project expense. As the largest expense in a construction project — many times even more than labor and materials — heavy equipment management is a critical factor in ensuring profitability. One successful construction company owner once told me "a good equipment manager can make a poor project manager look good." A well managed equipment fleet can be a competitive advantage for contractors who can have the right equipment available at the right

place and at the right time and with assurance that it consistently performs as expected, as well as be able to minimize total ownership costs.

#### **Key stakeholders in equipment asset management**

The executive team, the equipment managers and project managers all have a stake in how equipment is managed. The executive team wants to maximize their return on capital and improve the productivity of their fleet. They set the overall strategic goals and objectives for the shop and fleet, including making decisions about equipment replacement budgets, ownership structure to maximize the tax benefits and minimize any liability and financing options. They are interested in the utilization of the equipment fleet; they determine if the company's capital is best used by investing in additional equipment or additional projects; and they determine the size of the fleet.

The equipment managers make decisions about which repairs to do, scheduling the repairs to minimize the impact on projects and how to best accomplish repairs; and are responsible for the reliability and uptime of the equipment. They determine the preventive and predictive maintenance programs and are involved in the purchase decisions. They are responsible for the operational and policy decisions that affect the cost, performance and reliability of the equipment fleet.

The project managers provide feedback on the performance and reliability of the equipment and alert the shop to corrective repairs that may need to be made. They ensure the right machine is used for the right task and that the equipment on the job is being utilized and not sitting idle. Responsible for executing the job on schedule and on budget, project managers are concerned about the performance and reliability of the equipment.

Many contractors are still using manual methods to manage their equipment and are faced with numerous challenges as a result. Repair and replace decisions are difficult, utilization isn't easily measured and tracking parts in inventory and charging the right price for equipment on the right job is nearly impossible.

At any size it's important to know your equipment cost, fuel cost and utilization information because these factors impact your bottom line. But it's even more important as a company grows, when it's critical to use the best practices available to help the company be profitable and well managed.

#### **The power of automation**

When it comes to managing their equipment assets, heavy contractors should take full advantage of the powerful technology solutions on the market. Today's Equipment Asset Management solutions offer features and functionality that help heavy construction companies reduce expenses, run more efficiently and ultimately increase profits.

#### **Equipment utilization**

Nothing impacts the total cost of equipment ownership more than utilization. The number of hours a machine works in a year determines the rate at which fixed annual costs are recovered. Underutilized equipment does not have costs accurately reflected in job cost while greater utilization increases project profit.

With Equipment Asset Management software, contractors can continually monitor utilization of each piece of equipment and put the equipment manager in a position to measure the impact of low utilization and develop strategies to control and correct it.

### **Equipment downtime**

Equipment downtime is one of the most significant problems faced by heavy contractors. When a piece of equipment unexpectedly breaks down, not only is the project schedule disrupted and costing money, but multiple employees' schedules are interrupted since everyone is in crisis mode. The company has to scramble to get mechanics on the job site and get parts delivered to fix the breakdown. An unexpected repair is much more expensive to perform than to monitor and schedule maintenance.

Contractors using Equipment Asset Management solutions can provide the equipment manager with the necessary information to implement predictive repairs before equipment breaks down, thus saving the cost to the job and insuring reliability.

### **Repair — Replace — Rebuild**

The process of reviewing the equipment fleet, deciding which units to sell, replace, or rebuild and developing a capital expenditure plan is one of the most important tasks an equipment manager performs. Frequently it takes days to gather the information needed to make this decision from multiple places, such as accounts payable, finance, payroll and the shop.

Since Equipment Asset Management software automatically combines the operational, financial and mechanical history of a piece of equipment all in one place, with the ability to drill down to the lowest level of detail, this information is always up to date and at the equipment manager's fingertips, allowing intelligent and timely decisions.

### **Preventive maintenance**

Preventive maintenance should be considered as an investment as opposed to a cost. Effective preventive maintenance improves reliability, reduces future repair costs and ensures the machine will start at the beginning of each shift.

Equipment Asset Management solutions automate preventive maintenance scheduling and improve two crucial elements of preventive maintenance: consistency (servicing every machine at the correct intervals that extend the life) and quality (ensuring preventive maintenance is completed with the right parts and tools).

### **Warranty tracking**

Many times a mechanic will unknowingly replace a part or make a repair on a part or component that is still under warranty. The company ends up paying for a repair or part for which they should have been reimbursed.

Equipment Asset Management software automatically alerts the shop when work is being done on an equipment piece, part, or component that is still under warranty allowing the company to recoup these costs. It also alerts the shop when a warranty is about to expire allowing them to inspect the piece of equipment and make any needed repairs before the warranty expires.

### **Fuel tracking**

Equipment Asset Management solutions also provide the tools for effective fuel usage analysis reducing fuel losses and providing a double check on the hours worked by each equipment piece.

Today's construction market is extremely competitive and contractors can't afford to take risks with their equipment. Leveraging the advanced capabilities of Equipment Asset Management software gives contractors the valuable information needed to make more intelligent decisions that cut costs and increase profits.

*Dave Bennett is a product manager at Maxwell Systems, a leading provider of integrated construction business management and property management software solutions and service, including Maxwell Systems™ StreetSmarts®, a business management software solution designed for heavy and highway construction. For more information, visit [www.maxwellsystems.com](http://www.maxwellsystems.com) or call 800-688-8226.*