

Financial Implications of VMI for Electrical Contractors and Their Distribution Partners

BY PERRY DANESHGARI AND HEATHER MOORE

Skip, the owner of Highlight Electric, sits at his desk and tries to recall what he heard in a session on vendor-managed inventory (VMI) at the Independent Electrical Contractors convention. Take the number of electricians working in the field, multiply it by the loaded hourly labor rate and multiply the results by 50 (number of weeks in a year of working time). He calculates a few scenarios representing different sizes of jobs and companies (see Figure 1). The resulting number is the savings he will recover if he can be more productive one hour per week, per worker. That is only 12 minutes a day.

Materials handling can eat up as much as 40 percent of labor's time in the field. If Skip can reduce the amount of time his workforce spends receiving and returning materials onsite, the materials handling effort can be reduced by more than 5 percent. Twelve minutes a day is only 2.5 percent of his workforce's time on a daily basis on the jobsite. The reduction of receiving and return time can save 24 minutes a day, which is twice as much money than illustrated in Figure 1.

Contractors and distributors achieve top performance by minimizing both their variable and fixed costs through error reduction, process improvement and customer awareness. However, the biggest return in terms of cost reduction comes from targeting cost drivers (i.e., the elements of a particular financial model that have the

Figure 1: Potential Productivity Savings

Number of Electricians	Calculation of potential savings (number of electricians X loaded hourly wage rate X number of workweeks per year)	Potential labor cost savings of 1 hour per week per man
20	= 20 X \$65 / hr X 50 weeks	\$65,000
30	= 30 X \$65 / hr X 50 weeks	\$97,500
50	= 50 X \$65 / hr X 50 weeks	\$162,500
60	= 60 X \$65 / hr X 50 weeks	\$195,000

biggest impact on the end cost of providing a product or service).

Profits comprised only 5 percent of a typical electrical contractor's revenues in 2013. In other words, a \$1 million project returned only \$50,000 in profits to the contractor.

The biggest variable and risky cost driver for subcontractors is labor. The longer it takes to install materials, the higher the labor cost.

Any reduction in the cost of labor goes straight to the contractor's bottom line. The benefits from supplier services can help subcontractors significantly reduce the time currently spent on materials handling, allowing this time to be applied to productive installation instead (see Figure 2 on page 66).

For contractors performing commercial and residential jobs, the work is faster and less specialized, with materials and specs that vary widely from project to project. Contractors need suppliers that can help address labor costs by providing the right materials in the right quantity,

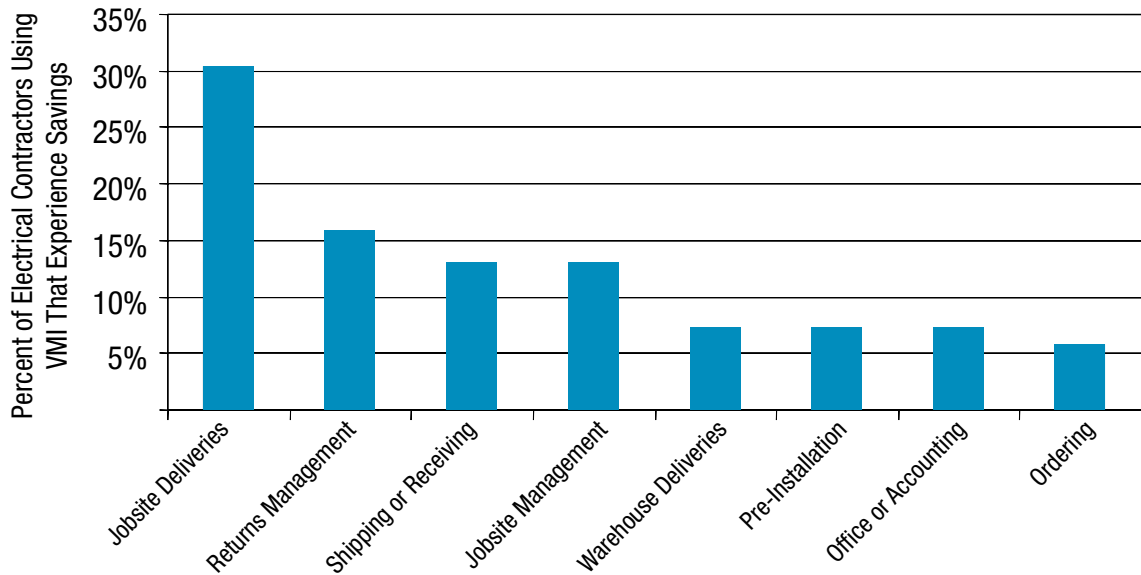
correctly packaged and delivered to the right place at the right time.

Obviously it's impossible to recover 100 percent of the time spent on materials. However, saving 50 percent of that time, or even 10 percent, significantly impacts the bottom line. In order to achieve the savings, contractors need to use their distributors' resources and expertise to address materials management needs and facilitate installation.

Additional Advantages to VMI

VMI also can reduce project support and backroom efforts. For instance, providing vendors with a bill of materials upfront will help them plan for rough quantities and timing of when materials will be needed, and reduce the likelihood of backorders or other errors. Another example is management of jobsite inventory either onsite or offsite, where the vendor can monitor purchases and burn rate (how often a certain material is used), so that neither the field crew nor the

Figure 2: Areas Where Vendors Can Impact Labor Cost



purchasing staff needs to bother with figuring out what to purchase, how much to purchase and when to purchase. There are more examples of these types of services, all of which require that both the vendor and the contractor reconsider their relationship with each other and recognize they operate with different financial models.


Every time the distributor processes a contractor's purchase order, it costs an average of \$72, not including the actual materials processing. That same purchase order costs the contractor an average of \$42; typical contractors process 4,000 purchase orders for every \$10 million of sales.

So, the contractor saves on its labor cost by the vendors reducing materials handling. Why would any distributor want to undertake this effort? The answer is simple: reduction of their cost drivers. The catch

is that their cost drivers are different than contractors' cost drivers. The distributor makes more money through better management of its fixed costs, which include inventory, trucks and other dedicated resources they must have independent of how much they sell. With that in mind, the biggest help a contractor can provide is communication and planning. Frequent, early communication will give a distributor the flexibility to manage its own inventory and processes in such a way as to be responsive instead of reactive while substantially reducing costs. Problems can be identified and solved before they become emergencies, further reducing costs for both parties.

As a true partner to its distributor, a contractor's procurement does not end with purchasing the materials needed or the typical "job buyout" process. The procurement process for a contractor has six distinctive steps:

1. procurement plan;
2. procurement schedule;
3. job delivery;
4. job materials movement and management;
5. returns; and
6. lessons learned and post-mortem.

Overall, the labor cost savings that a distributor can provide outweigh and dwarf the materials cost savings that a contractor can recoup via negotiations and multiple bidding practices. For contractors, this labor cost savings requires a true partnership with distributors and a commitment to understanding, measuring and reducing each other's cost drivers. 

Perry Daneshgari is president and CEO of MCA Inc., Grand Blanc, Mich. Heather Moore is vice president of operations. For more information, visit www.mca.net.