

# PAPER TRAIL

Are electrical contractors gagging on paper? Inefficient internal work processes and paper communications chew up electrical contractors' profit dollars.

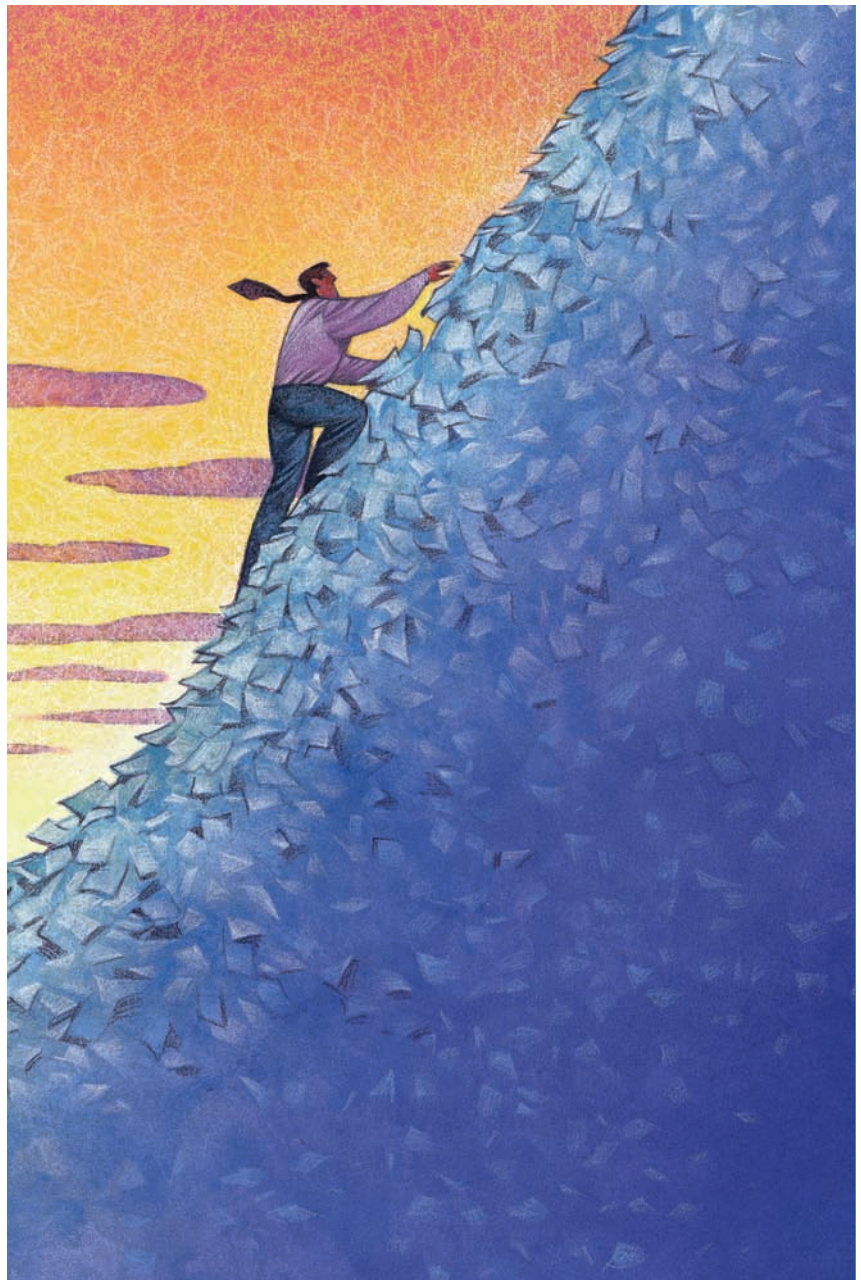
By Allen Ray

It really makes no difference if electrical contractors bid on and build new construction or have a fleet of service trucks, because they are choking on a glut of paper generated by you — their distributors. The paper nightmare starts with how electrical contractors place orders for materials.

According to a survey of electrical contractors by Allen Ray Associates, Arlington, Texas, it's painfully obvious the paper glut is costing your customers precious overhead dollars that cut into their profits. Is all this paper really necessary?

Approximately 74 percent of responding contractors with annual sales of more than \$6 million received at least 101 paper invoices each month from their suppliers. Some received more than 500 paper invoices. These invoices flow in from as many as 10 or more different suppliers. Invoices can represent one or more pieces of paper, with anywhere from a line item for one product to multiple line items for dozens of products. When these invoices are coupled with other paper offerings such as product submittals, acknowledgements, proof of delivery, miscellaneous changes to blanket orders and monthly statements, the total amount of paper handled by the contractor's back office can be staggering. It's not uncommon to see stacks of invoices, faxes and other miscellaneous piles of paper in an electrical contractor's accounting department being hand-matched to purchase orders.

Said one electrical contractor, "Shuffling so much paper causes us to make mistakes, adds additional phone calls, delays payments and makes us have



## MISMATCHED INVOICES

Percentage of Invoices That Don't Match	Percentage of Respondents
20 percent	89 percent
21 to 30 percent	3 percent
31 percent +	8 percent

**Table 1.** A staggering amount of invoices don't match up.

## WHY INVOICES DON'T MATCH

Reasons that Invoices Don't Match Purchase Orders	Percentage of Times Occurring
Price	63 percent
Wrong item shipped	13 percent
Back-ordered item	7 percent
Bad item number or product description	9 percent
Wrong credit terms	8 percent

**Table 2.** Pricing discrepancies seem to cause the most problems with inaccurate invoices.

'summit' meetings with our suppliers to resolve disputes. Manually handling paper takes time that we don't make money on."

For some contractors, these confrontations with suppliers have become a way of life, and caused them to lose potential office efficiencies.

To reduce these confrontations, more than 56 percent of the respondents said they have negotiated prices for their most commonly purchased items. These contractors believe negotiating prices helps alleviate some of these problems, but that too much paper still comes across their desks. "We honestly thought that by negotiating prices, we would alleviate a lot of our confrontations and that it somehow would increase our through-put or the amount of business we were capable of handling," said one exasperated electrical contractor. "But just the opposite has happened. My guess is we handle the same amount of paper or more. We obviously have a problem that has not been properly addressed."

### WHERE THE PAPER PROBLEMS START

**Bid-design and build.** Of the 76 percent of respondents who use estimating software, virtually all recognize they have a problem with the prices they use to develop estimates. These electrical contractors say most distributors keep the actual "buy" price secret until they are ready to purchase. To be fair,

commodity prices do fluctuate, and distributors don't want to lock themselves into prices if their costs for producing those products may rise significantly.

After electrical contractors win a bid and start shopping the bill of materials for the lowest pricing, they communicate primarily by fax. According to the

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survey results, the bill of materials is converted to a fax 64 percent of the time; they send purchase orders electronically to suppliers less than 19 percent of the time.

**Service contractors.** If an electrical contractor runs a fleet of service trucks, someone restocks the trucks as needed. These trucks often go directly to suppliers to pick up materials, and purchases are put on a specific job account or general account or made with credit cards. Whether products are ordered ahead of time or at the time of pick up, invoices are generated and the paper trail continues.

## ELECTRONIC DISCONNECT

Electrical contractors using software to determine a need for products say they are frustrated no off-the-shelf software exists to transfer their bills of materials seamlessly to suppliers and then back into their accounting software. "We have looked for a simple electronic solution to order and receive all other supplier-generated documents (shipment notices, delivery receipts and invoices) so we can import or merge these documents into our accounting packages," said a five-location contractor. "The electronic disconnect that exists between our company and our distributors is costing both of us money."

To put this paper glut into perspective, many electrical distributors feel they must generate invoices on a daily basis. Distributors indicate that in some circumstances, they batch daily invoices and mail them for legal protection in their respective states. In addition, they may mail monthly statements. Some include duplicate copies of invoices. It all creates unnecessary bales of paper that electrical contractors must manage. Some electrical contractors store all of this paper, but others are trying to find electronic solutions. One would think with the falling prices of computer

hard drives, contractors would at least convert the paper to electronic files for storage purposes.

Many electrical distributors, electrical manufacturers and some independent manufacturers' reps rely on the Industry Data Warehouse (IDW) and the IDX2 value-added network (VAN) created by Industry Data Exchange Association (IDEA), Rosslyn, Va., to eliminate paper and synchronize product data. Unfortunately, IDW and IDX2 don't yet directly link to electrical contractors and other end users. IDEA has succeeded in removing large chunks of cost between distributors

and manufacturers by communicating orders, invoices and reconciliations electronically. For more information on IDEA's documented savings, visit [www.idea-esolutions.com](http://www.idea-esolutions.com) and click on the "Valuable IDEA" white paper.

For every purchase order issued, respondents said they received far too many invoices. The amount of invoices depends on the purchase order's size and content, but some contractors said they sometimes received more than 100 invoices for some large purchase orders. The net result: the contractor's accounting department must reconcile piles of paper with the original purchase orders. (See Table 1 and Table 2.)

Manually reconciling invoices with purchase orders is so labor intensive for some companies that they use anywhere from a few man-hours to man-days to measure the process, which is complicated by the wrong products being shipped to the wrong job sites, and shipments of incorrect quantities. Some respondents said third-party product databases are the silent culprit for data errors in estimating and ordering because of the editorial license they take with pricing information to fit that data into their software offerings.

When it comes to purchasing products, 64 percent of respondents said automation quickly stops, and reverts to a fax machine, phone calls to suppliers, snail mail or visits from a distributor's salesman to pick up paper. Complicating matters is that contractors sometimes issue verbal or paper purchase orders (POs); others issue a blanket PO, or POs specific to the job(s). Contractors even go so far as to set up specific accounts with various suppliers to segregate material purchases by customer or job. The net result for most contractors is that paper begins to flow back to their offices.

Follow-up interviews with respondents revealed that the majority of contractors, while aware of their overhead, really have not taken a serious look at how they could control the labor-intensive effects of so much paper. This mind-set has developed over the years because many contractors say they are most interested in getting the job done under budget. Back-office and accounting efficiencies are just not on their radar screens.

Most respondents said their estimating software systems didn't seamlessly link to their purchasing department's

THE AMOUNT OF TIME OWNERS THINK THEIR ACCOUNTING DEPARTMENT SPENDS EACH MONTH CONTESTING INVOICES WITH DISTRIBUTORS	
Less than two man-hours	66 percent
Three to eight man-hours	28 percent
One to six man-days	6 percent

THE AMOUNT OF TIME CONTRACTORS' ACCOUNTING DEPARTMENTS SAID THEY SPEND EACH MONTH CONTESTING INVOICES WITH DISTRIBUTORS	
Less than eight man-hours	12 percent
One to two man-days	11 percent
Three to 14 man-days	63 percent
15+ man-days	14 Percent

**Tables 3A and 3B.** The owners of electrical contracting businesses and the personnel working in accounting offices have very different ideas on how much time they spend contesting invoices with distributors. Follow-up interviews show that as the man-hours increase above eight man-hours, the quantity of paper in some cases rises to a multiple of 10 times the original purchase orders.

accounting software. This forces contractors to either manually enter line after line of data or record it as single entries in their accounting packages. This type of accounting entry does not give them visibility to quantities and prices and causes dependence on paper as the back-up documentation for that contractor to deal with many suppliers.

One business owner summed it up when she said, "We want and need seamless integration with our estimating, purchasing and accounting systems. As it stands right now, our current software systems don't link together and we spend a large amount of time toggling between systems for prices, quantities and invoices, not to mention trying to figure out what supplier needs to be paid and what amount."

She said four of her suppliers display invoices on their Web sites, but her company can only download and print PDF files of them, and cannot download this data directly. "What we really want is the ability to import or load all of the distributor-generated documents — for particular invoices — into our accounting package," she said.

She added that online access to her purchasing data would offer the real possibility for her company to manage material payables on a tolerance or exception basis, where the system would "kick out" invoices with errors in pricing or product quantity that exceeded a predetermined amount. She gave the example of a one-quarter percent to

one-half percent, plus-or-minus tolerance per line item and per an invoice's extended total (price multiplied by the product quantity).

Many respondents said they were taught to contest all prices and invoices when there is a variance, regardless of the amount. They only believe they are paying the correct price when the invoice and quote match exactly, regardless of how much time or paper is involved. When these respondents were asked how much time it took to reconcile invoices and POs, their estimates were consistently lower than their accounting department's estimates. (See Table 3A and 3B.)

**Conclusion.** Contractors are under constant price pressure, whether it's in the form of bids, material, service contracts or labor contracts. To alleviate the rising cost of handling paper, especially historical records, it can pay dividends for a contractor to seek out suppliers that offer electronic-order and accounts-payable capabilities that link seamlessly with their accounting department and software.

Smart electrical contractors will be looking for electrical distributors that offer an electronic means of doing business to help streamline their back-office functions and ultimately improve profitability. □

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