High-Tech on Site: Friend or Foe?

by Paul Eldrenkamp

n a job site a few years ago, we were talking about which power tool could do the most expensive damage the fastest. I voted for the handheld power planer, but the consensus was leaning toward reciprocating saws. Then, some joker on the crew grabbed my notebook computer and held it high in the air. The thunderous ovation that followed still echoes in my ears.

The crew was right, of course. Technology — computers, faxes, cell phones, you name it — acts like an amplifier. If I'm a sloppy estimator, a computer helps me to do even more sloppy estimates — and I do them faster than ever. If I'm an overly optimistic scheduler, I can now generate schedules with up-to-the-minute inaccuracy. If I don't have time to return phone calls now, with the right technologies, I will have the capacity not to return pages, faxes, and e-mails, either.

Still, it's easy to embrace technology for technology's sake. And guess who in a remodeling company is most inclined to be seduced by technology? The office staff and especially the owner. So it's not surprising that the field crew believes the most dangerous people in the company are the ones thrusting these superfluous electronic devices on them. To appreciate the crew's point of view, imagine a GameBoy that has only really boring games on it, games like "Find the Phone Number" and "Schedule the Appointment." It's hard to get psyched about that, especially when the paper systems already in place do the same thing faster and in a totally comfortable and intuitive way that doesn't

involve yet another size battery.

Cost vs. Benefit

Don't get me wrong: Technology can help in the office. It will not, however, necessarily have much affect on a lead carpenter's productivity on the job site. To put this in perspective, imagine two jobs. Job A is run by a well-trained lead carpenter who uses a detailed, thorough job book, and has a client who plays by the remodeler's ground rules. Job B is inadequately defined, run by a poorly prepared lead carpenter, with a client who expects far more than the contractor is prepared to deliver. Which project needs the technology that allows frequent and instantaneous communication? Job A could run for days without the office hearing a peep from lead carpenter, subs, or client; Job B will generate endless pager and cell phone traffic. But the higher volume of high-tech communication doesn't signal increased productivity — in fact, it signals just the opposite.

Because I've attempted Job B more often than Job A, I've learned the hard way that remodelers have to be very careful about embracing expensive new technologies. Each technology purchase should be evaluated according to two criteria: What value does it add for the homeowner, and what value does it add for me? In other words, what is its return on investment for my bottom line, especially compared with other tools that can achieve the same goals? For instance, if I spend \$1,000 per person on Palm Pilots, accessories, and training time - plus another \$200 or so a year on support, repair, and replacement costs — what am I getting back? Will lead carpenters with Palm Pilots be that much more productive and helpful to the client than lead carpenters with good paper systems? Some surely will, but to make up for those who won't, carpenters using the electronic gadgets need to be that much more productive. Unless we analyze the cost-benefit honestly, we can waste a lot of money.

Laptop Lesson

A good case study is my purchase of laptops for a couple of lead carpenters — this was one of my most humiliating failures (and I have a lot to choose from). It all started when one lead carpenter mentioned that he'd really like to learn computers. The response that could have saved me perhaps \$10,000 should have been, "I like that sort of initiative — just what do you mean, though, by 'learn computers'?" I could also have asked the other leads if they really wanted to "learn computers," too.

But no, I didn't ask those questions. Instead, I spent thousands on computers, software, and training, then sat back and waited to reap all the benefits of the technology. But instead of reaping accolades from my peers for being such a cutting-edge remodeling contractor, all I accomplished was to remind the world what an idiot I can be. Because there were no benefits. It was a total waste of time and money. I had forgotten that I had pretty much stopped running jobs by the time I got my first computer in 1989. I had forgotten that I learned how to use computers over the course of several years,

not as a lead carpenter but as a manager and salesperson.

The reality was that my lead carpenters didn't need laptops to do their jobs well — in fact, they viewed a laptop on the job site as a liability. It might get stolen, or it might get ruined by the dust or crushed by a 16-foot 4x12. Plus, on site a laptop is hard to use, and the time it takes to figure out how to make

and printed at the office by the office manager in about five minutes than to boot the computer, open an application, and scroll to the right entry. This was especially true when every one of those actions — so second-nature to me — was for them fraught with uncertainty, confusion, even fear.

There is simply no great leap in productivity a lead carpenter can make by

clients on whose jobs he has worked worship the ground he walks on.

Time may prove me wrong on this, but for now I trust the smart and enormously skilled production crews we have managed to assemble. If you ask them what they really need to do their jobs better, you will not hear much talk of electronic gadgets, and you will rarely hear the phrase "information technology." You will hear the word "information," though, and you'll hear it fairly often. For owners, "information" means "technology," but to the crew it means "content." They need the answers to questions like: What does the client expect? How hard will the client be to work for? What pet peeves should I watch out for in particular? How much time do I have to do this job? How much money? What has the office already figured out and what is left for me to figure out? What subs and suppliers have you called, and which ones am I supposed to call?

To provide this kind of information, you need a system. But you don't need high-tech gizmos. And when it comes to the job site, I think you're better off without them.

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it useful is time they could be spending doing their real job, which is getting this project done on time, on budget, and to the client's satisfaction.

So they left the laptops at home, but even there the computers weren't much help. The carpenters could keep a schedule in a Day Timer without any special training, and a pencil and a piece of paper were intuitive, effective, and immediately productive. It was also far easier to get phone numbers off a list of subs and suppliers produced applying modern information technology. As final proof, consider one of my subcontractors. This man — whom I truly admire and respect, and who consistently is one of our smartest, most sensible, and easily most reliable vendors — has no computer. As a matter of fact, he has no cell phone, no pager, no e-mail, and certainly no Palm Pilot. He is never over-committed, is consistently able to hold to a schedule and a budget, and takes most of August and December off every year. Those of my