

A utomation is finally taking hold among hardhats, and it isn't going away.

Automation has come to construction for a number of reasons. Productivity in construction hasn't increased at near the rate that it has in other industries, for one, so everyone knows there's ample room for improvement. Safety can stand to improve, too. But perhaps the biggest reason automation is being adopted is the higher-than-ever demand for construction, coupled with a growing labor shortage—and materials prices that are skyrocketing.

If contractors want to compete—and want new building starts to stay high—they need *something* that helps them work smarter, faster, and easier: in short, more efficiently.





Self-driving vehicles, robotic bricklayers, document-sharing software, smart safety vests, digital time tracking: What's going to bring you the greatest ROI in the short term? And what will have secondary benefits—such as impressing potential hires and helping you build a stronger team—that should lead to higher productivity and more profits?

This eBook takes a look at 5 ways to make the automation game work **for you and** *your* **business**.

Processes that are time and resource intensive and subject to human error should be the first processes to be investigated for automation.

- Alexandro Pando, CEO, Xyrupt (Forbes article)



1.

Decide what *your* business should automate first.

It would be nice to be able to try out all the latest apps, equipment, and high-tech innovations on a whim, and not have to worry about ROI.

Few contractors can do that, though. Either your margins are far too tight or it would wreak havoc on your project schedules and operations if some of the experiments went wrong.

What's more, different processes demand different levels of attention, and affect your business in different ways. So trying to implement multiple process changes at the same time is like trying to juggle hammers and eggs—not advisable.

Types of Automation Implemented by ExakTime Customers[†] in Recent Years:

Smart Equipment - 11%



Safety Technology - 17%



Document Management Software - 27%



Project Management Software - 41%



Time Tracking Software - 85%

 † Breakdown of 75 ExakTime survey respondents: 70% specialty contractors and 30% GCs; 60% with 50-99 employees and 40% with 100+ employees.





If your construction business is just taking its first steps toward automation, it might be a good idea to start small. Look around at what is most desperately in need of cleaning up or speeding up—or maybe choose to automate part of a process.

Suppose you can't seem to get your excavator operators to routinely check if their machines need tune-ups. You might decide to purchase a smart excavator—or you might strike for the middle ground with equipment tracking software. Your equipment won't maintain itself, but you'll be able to track its usage and predict when it'll need a tune-up to avoid dangerous breakdowns—so you'll get what you most needed.

Find a manual process for which simple tools can be inserted to make that process quicker.

-David Murray, Doctor.com



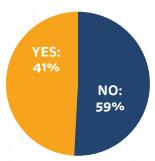




Lof HR or the hiring process. You'll still take care of posting ads and setting up interviews manually—but you want your **new hires funneled through an automated system** that gathers all the necessary forms and documents to ensure compliance.

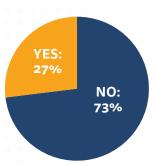
On the other hand, you might conclude that your project managers will work smarter with either a scheduling or a document management or automated bidding tool. Or maybe you decide to automate your time tracking process.

Have you implemented project management software in the last five years?



Among ExakTime customers with over 50 employees, 41 percent said they had implemented project management software—i.e. Sage, Foundation, or Buildertrend—in the last five years. Why? Most said to be "more productive" and "more organized/efficient".

Have you implemented document management software in the last five years?



Among ExakTime customers¹ with over 50 employees, 27 percent said they had implemented project management software—i.e. PlanGrid, Timberscan, Docusphere and Digio—in the last five years. Why? In order to be more productive.

 † Breakdown of 75 ExakTime survey respondents: 70% specialty contractors and 30% GCs; 60% with 50-99 employees and 40% with 100+ employees.







Put your best foot forward for new hires.

With a serious labor shortage that shows no signs of letting up, a lot rests on the first impression you make on new candidates. You never know—the next person who walks on your job site might be employee gold, so you don't want to turn them off before you've had a chance to talk.

Your job ads are the first things potential hires come into contact with, followed by your applications and other HR processes once they meet you face to face. One way to immediately portray your company as modern and efficient is with automated HR services.

Cloud-based digital platforms exist today to offer comprehensive "hire-to-retire" automation and document management. These are a few of the things HR platforms can automate:

- Digital job ad posting & email correspondence with candidates
- Automated form & document collection
- Integration with eVerify or other compliancerelated software





4.

Meet the demands of younger workers.

Who will be the typical Joe or Jane Construction Worker in five to ten years? Based on age alone, it won't be a Baby Boomer, as most of them will have retired.

That leaves Generation X on down to Millennials and Gen Z. Individuals who were born with smartphones or tablets in their hands. Who were raised on technology. They can type a text message faster than a speeding bullet, they get video games intuitively, and they prefer apps to interacting with someone IRL (if you don't know what "IRL" means, look it up now).

As soon as you start talking to those young and future-focused candidates, you should tell them about any automation your company has adopted—such as digital time tracking or smart equipment—and *why*. These are all **selling points** for snagging forward-thinking new hires.

Reasons ExakTime Customers[†] Chose to Use Time Tracking Software

Simplify Payroll - 76.6%

Be More Organized - 65.6%

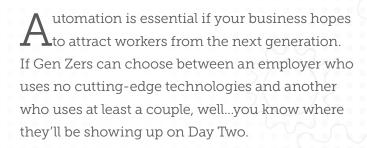
Reduce Hour Rounding - 37.5%

Ensure Labor Law Compliance - 26.6%

 $^{\rm t}$ Breakdown of 75 ExakTime survey respondents: 70% specialty contractors and 30% GCs; 60% with 50-99 employees and 40% with 100+ employees.







- The types of automation that those born in the New Millennium have come to expect—their digital ground floor, so to speak—are things like HR automation, digital time and cost code tracking, and GPS tracking.
- Automate more than the minimum to ensure
 the retention of younger people. Gen Zers will
 be impressed and excited by the use of drones,
 virtual reality, and safety technologies, from
 VR simulations to biometric wristbands to
 smart PPE—such as safety vests that can detect
 toxic fumes, deploy an airbag in response to a
 fall, and more.

When we think about construction automation, we should think about robotics applications.

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For larger businesses, purchasing new software or equipment is a budget line item. There is room to wait and see if it brings ROI before deciding whether to continue or give it up.

For growing construction outfits, however, adding new spending with an unpredictable return on investment ranges from risky to financially unviable. What's more, regular credit card loans can be costly and often the line of credit doesn't come close to what you need.

Once you've made your choice on the automation option or options that you think will be most valuable for your company, there are a few ways to boost your cash flow quickly and safely.

- Small Business Administration (SBA). The SBA provides loans and credit lines from \$500 all the way up to \$5.5 million for everything from working capital to fixed assets like equipment or machinery.
- Kabbage, FundBox or BlueVine. Each of these online lenders has slightly different loan limits, terms, and annual revenue minimums, but they're a great way to get financing quickly.
- Small banks or Community Development
 Financial Institutions (CDFIs). These are
 the lenders most likely to approve loans for
 businesses with less than a million in annual
 revenue, according to a 2016 Federal Reserve
 Small Business Credit Survey.





