They say to be considered an expert in something you must spend 10,000 hours doing it. And having spent most of my career as a contractor, one thing I have personally observed is that successful projects happen because of having such experts on the payroll.

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I think the answer is simple. As a company grows and there are fewer experts to support a greater number of projects, the institutional knowledge required to be successful will need to come from new sources. This is not to diminish the importance of the people that know how to build the work. In fact, it's just the opposite.

The right tech tools, woven in and around expert knowledge, will become critical to the success of the modern construction company. This will be accomplished by ensuring that while the experienced project manager may make effective decisions based on "gut feel," the inexperienced project manager will be able to make decisions based on a more analytical approach that leverages reliable data.

## **Putting Predictive Analytics to Work**

<ck `XcYg'h`]g`\UddYb3'K \UhžYI UMinžWb`=YI dYWihc``YUfb` from a computer that I can't learn directly from my 40-year j YhYfUb`gi dYf]bhYbXYbh3'H\Y`Ubgk Yf`k ]``VY`X]ZZYfYbhZcf` different companies, but it will essentially have to do with leveraging the vast amounts of data in our possession to create meaningful and actionable information.

For example, imagine you are preparing an estimate. With the right technology tools, you can do your takeoff on the concrete footings of a building, input the dimensions, identify the rebar factor and class of concrete, press a button, and be presented with a number that is not only more expedient but more reliable. You can even do things like grab the last few jobs that are most similar and see if your past costs and productivity rates are in line with the predicted cost of the work you are currently estimating.

But double-checking your work takes time, you say, and you've got a lot of work to do, plus you are the one who estimated U``f\cgY`cf\Yf`'cVg`]b`f\Y` fghd`UWzgc`cZVt/i fgY`nci `k ci `X` YI dYVt/ih\Y`bi a VYfg'fc`VY`g]a ]`Ufzf][ \h3: cf`k \UhYj Yf`fYUgcbž you felt the estimated cost of this concrete item was important enough to validate, and you made the conscious determination hc`Ug\_`U'gdYVJ Wei Ygf]cb`UbX`fYgYUf Yf`fYUgz

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based on a statistical inference, this estimate may deviate from other past similar projects performed by your company.

Maybe one of those patterns helps determine a design issue, or a UnVY']h 1 gh Y'dg' bX'gca Y'ZJH b[Yf'a]ghJ\_Ygžcf'Yj Yb'h Y' misapplication of a particular ratio. With the right predictive analytics tools, a new employee's inexperience can be greatly supplemented by a company's own institutional knowledge already residing in their information systems. And that's a huge win.

## A Future Worth Having

It's hard to envision how a new workforce that fundamentally lacks the expert knowledge of having built work for decades will be successful in helping our companies grow and thrive in today's construction market. At the heart of it will be an industry transformation and a willingness to embrace new hYWkbc`c[]Ygži g\Yf]b[`]b`k ]h\`]hU'g][b] Wbh'WkUb[Y`hc`h\Y` way we do business.

HNY Xf]j ]b[ ZcfW cZg W UWUb[Y3 =hk] Wa Y Zfca 'h Y bYl h generation of tech-savvy managers who will add value in ways that don't rely on gathering hard knock experience alone but can derive a similar "gut feel" for how a project is performing and predict when issues may be starting by leveraging the vast amounts of data being collected by our information systems every day.

Now go sign up for that TikTok account. You know you want to, UbX'k \c`\_bck g3'Nti 'a ][\h'i gh'a YYhi\Y'bYk Ygh[YbYfUh]cb'cZ' experts you never knew existed.

