

Why Risk Management is Really Confidence Management

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The days leading up to the signing of a construction agreement are nothing short of intense. Whether it's bid submittal day as a contractor or a final investment decision moment as an owner – there is a lot to process. Last minute changes, tweaks, and edits take place, people double and triple check their numbers all with hopes the pieces for success will fall into place.

Technically speaking, today's best risk assessment tools are built upon well-established statistical principals and utilize helpful algorithms to report out the probability of a planned outcome.

With such powerful tools, however, it's easy to overlook the fundamental goal of risk assessments – building and managing confidence.

In essence, confidence that your project will actually yield a planned result.

With this in mind, we can outline how you can go about practicing confidence management successfully, providing you with stronger outcomes for your projects – right from the start.

Start by Asking the Right Questions

It doesn't take a team of data scientists to interpret the current trends for CAPEX project outcomes, at least pertaining to cost



and schedule. After all, overruns are more the norm rather than the exception these days. That is why I like to approach the topic of risk in terms of measuring confidence.

Asking particular questions can help you get started. How confident are you of your plan? Have you seen what your plan looks like with risks included? How confident are you in understanding your risk exposure? And most importantly, do you know why you are exposed?

On the surface these questions may seem straight forward but don't be alarmed if you can't answer them yourself. Construction teams are built around experts in their areas, and it takes a team approach to reach a conclusion. So how do we create confidence in a team? We measure certainty.

Practice Risk-Adjusted Forecasting

It's a safe assumption that everyone in the construction industry has an understanding of what a forecast is; using some performance factor applied to your plan over time will yield a forecasted outcome. Risk is no different.

If we apply a risk and its associated impact factors to a plan and run several iterations of the plan, results will yield a range of outcomes with corresponding levels of certainty (0-100% probability).

A team can then target a percentile value – P75 – and receive a quantitative result they can use to compare against the original plan. In other words, if a team wants to be 75% certain of hitting project cost and schedule goals, they would look to cover any contingency needed to reach the P75 target. When the target indicates a larger contingency value than originally accounted for, you have risk exposure.

Increase Confidence through Proper Risk Identification


So, now you know there is exposure – what's next? Luckily, there's no need to push the panic button just yet. In order for a range of outcomes to be generated in the first place there needs to be pushes or pulls to the original plan. These come in the form of either cost or schedule impacts, positive or negative. Remember, not all risks are threats; there are opportunities as well.

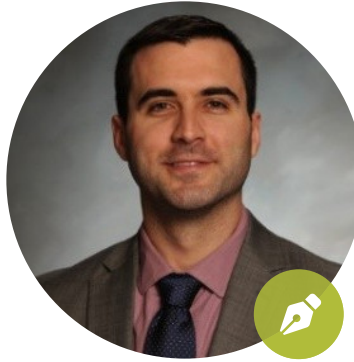
A simple report called a tornado chart comes to the rescue. This powerful graphic ranking tool orders the most impactful drivers of the risk exposure from top to bottom and points the team directly to top candidates for mitigation.

Practice Measured Risk Mitigation

How much should teams mitigate? The ability to quickly iterate risk simulations is a must in this case. A risk may not fully need mitigation for it to drop from the top contributors of risk exposure. Turning various intensities of mitigation on and off will result in the most cost-effective method of managing risks.

Furthermore, your team can and should use this cost/benefit approach by running a number of scenarios until they reach their target certainty. At that point, you will not only have a highly certain schedule and cost forecast, but you will have introduced a third dimension to the project plan and the whole point of the forecast's existence – project confidence.

By using the right tools and methods, you can conduct risk assessments that will elevate your project to a higher level of success. Managing your project's confidence through risk assessments will not only lead to more project wins more often, but help you attain a seemingly elusive project confidence level more often. 



About the Author

Nate St. John is the Product Director for Scheduling & Risk Management at InEight and is also an expert consultant within InEight's Industry Solutions team. Nate's real-world experience and passion for planning, scheduling and risk can be seen in his thought leadership contributions to the field, as well as in his timely and practical industry updates on the latest technological advances in construction planning software. Prior to InEight, Nate gained deep project knowledge working on programs for large capital projects.

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