

Good morning, everybody. Dennis Engelbrecht with the legacy series of Digging Deeper.

Today I want to talk about the future of LEAN or perhaps the future of pull planning. Since the pandemic, we've had tremendous supply chain disruption, which has made executing work in construction very, very difficult and much more difficult than it was before. And I've heard a lot of people say, well, now you just should throw LEAN or pull planting out the window because it doesn't work anymore. It was based on just in time. And today it's like never in time versus just in time it's more the way the things are, so LEAN and pull planning and those things just won't work. Well, I probably differ in that. They may become more important, but again, it's how you use those tools. If you think you're going to have an original planning session today and for all those pieces that you plan to be in place now are going to end up being in place, that probably isn't going to happen.

But if you think about how LEAN and pull planning occur, it occurs with a team. And it's got lots of possibilities, and you have lots of reports for if things do happen, don't happen. You have communication among all parties, so perhaps that's more necessary now to find out what isn't going to happen and what are our contingencies and how do we keep the project moving with this situation that is now occurring. So yes, it is more difficult, but is this never on time situation mean that the tool is gone? I'm going to say probably not.

Now, also, is this situation permanent? We're in this era of supply chain disruption, and a lot of things were out of supply. And a lot of things are still out of supply. With COVID, there certainly has been a major shift across the world in a lot of things we've all pulled in. And this probably happened during the last administration as well, that rather than being more international and more international supply chains, everything is now pulled in more, so we've got more reshoring versus offshoring going on. We also have a labor supply shortage that has been partly created by people being sick but still as persisting in almost all the industries that affect construction. We have changing demand patterns, so along with that has been changing sector strength in construction. So we need more of certain products and less of other products. All of these has contributed to our supply chain disruption continuing.

So rather than thinking that just in time and LEAN and pull planning are gone, maybe JIT, just in time, is moving to JIC, just in case. So now we need a lot of contingencies just in case we can't get this product, just in case we can't get it on time, just in case there's a flaw in the delivery or whatever. There's a real premium today on knowing when items are going to arrive and when phases of construction are going to be able to be completed. And this premium requires substantial added effort, possibly even substantial added staff to maneuver through up and down the supply chain to find out the truth or, truth probably isn't even possible, to find out the best estimate of what's really going to happen on the flow of supply. So, we need flexibility and contingencies to deal with the uncertainty. And I think LEAN and pull planning and the processes are good tools for that.

By the way, this substantial effort that it requires may not actually be new. It may be that some of you just weren't doing it and you were relying on trust and the easy answers that you got from suppliers and things like that, and there certainly are plenty of project errors and problems that occurred because you may have taken an easy answer. But I can remember 15 years ago now when I was in the miscellaneous metals business a project leader from several hundred miles away showing up in our shop to find out when things were going to happen and when things were going to occur on their job. Now, if you think about that, our trade probably represented 1% of the project, and I had a person in my shop trying to make sure that our projections were real.

So that's a substantial effort that isn't necessarily new, but what I've seen in my experience is not every company, probably not even most companies, have put in that kind of effort at the project level to make sure that they understood the whole supply chain. But now suddenly, that's become necessary for everybody to do, but maybe that's a good thing. Maybe rather than thinking that this is a new approach, this is the approach that we should have been doing, but we maybe got

a little bit lazy or allowed our people to be a little bit lazy and taking the assumptive approach instead of the verification approach. So, for all of you out there, I'd encourage you not to throw the baby out with the bath water. Maybe JIT is just moved to JIC, just in case. And if you don't inspect, don't expect.

Dennis Engelbrecht, Digging Deeper.