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Mini-Interview, Texas A&M University

Could you give a brief overview of the process that you plan to demonstrate during the workshop?

Participants will be introduced to key principles of Target Value Design by playing a serious game and seeing how the principles are then applied to actual construction projects.

I understand that the workshop will be quite interactive. Could you give an idea of what activities the workshop attendees will be involved in?

Trying to understand a new process through a PowerPoint lecture alone can be ineffective. The best way to understand how an unfamiliar process such as Target Value Design works is to play what is sometimes called a “serious game” or “simulation.” In this workshop, participants will be actively involved in building something using the TVD process.

What do you see as the major benefit of Target Value Design? Why should a contractor invest significant time and effort into adopting this methodology?

Target Value Design is rapidly becoming an industry standard, especially for complex projects such as healthcare facilities. With TVD, estimators need to be able to estimate rapidly—even in real time—as alternatives are being weighed and compared by the stakeholder design team. TVD is changing the estimating professional from reactive “accountant” to proactive “advisor.” Estimators are doing this using assembly cost/Unifomat estimating or building information modelling, among other things.

What is the most common misunderstanding that estimators have towards Target Value Design, and what can you show or say to educate those new to the process?

Estimators sometimes think TVD is simply another form of value engineering. However since value engineering is often practiced as an end-of-design cost-cutting measure, it can demoralize an owner and design team because it eliminates some of the best features of an architectural design. By contrast, TVD estimating takes place throughout the design process and with the full participation of the core OAEC (owner, architecture, engineering, and construction) stakeholder team so a range of value for money alternatives are continually being explored. This is the difference between reducing the weight of an elephant by cutting off its trunk or by instead feeding the elephant an appropriate diet so its physical integrity remains intact. The latter process is what happens with TVD.

What are the remaining inefficiencies in the Target Value Design process? What could a contractor show in terms of their innovation of this process that would genuinely impress you?

Building owners are sometimes surprised that estimating alternatives can take longer than expected. A contractor that has developed the capacity to estimate in real time is pretty impressive.



Kevin Miller
Professor
Brigham Young University

Mini-Interview, Brigham Young University

Could you give a brief overview of the process that you plan to demonstrate during the workshop?

Stuart and I plan to show the different workflows of BIM estimating using a Navisworks to Sage Estimating and an Assemble to Excel workflow. Often people think that if I use BIM takeoff that there will be no 2D takeoff. While this idea is appealing, it is false. Both 2D and BIM takeoff is needed. This workshop demonstrates the different workflow and provides attendees an opportunity to determine which workflows would work best for them in a non-sales environment.

A benefit of the process is that it is quicker to update estimates from new design iterations. How much more quickly can an estimate be provided using these new tools, compared to alternative/traditional methods?

The time savings from the model estimating approach should save significant time compared to tracing lines in the 2D takeoff approach. The time that was spent tracing lines can now be used to be more interactive with subcontractors and suppliers providing quotes for the project. This of course is all dependent on the quality of the model received from designers.

How easy would a contractor find it to adopt and use this new process? Is this something that a handful of specialists should take responsibility for, or will any estimator be able to pick up these new tools?

One of the things we hope to demonstrate is that BIM estimating does not mean eliminating 2D takeoffs. Both are needed. The BIM takeoff process will be in addition to the 2D takeoff process. Each of these takeoff methods has their strengths depending on which scopes are being taken off. These tools should be used by the estimator rather than by

specialists. Like any new tool, the only way to learn how to use them is by spending time using the tool. Typically the more control the tool gives you, the more time required to learn how to use the tool.

I understand that you have been working closely with major software developers to test the new tools. Did any major challenges or errors occur when testing the solution and if so, how did the team work to resolve those?

The process of working with the software company to help develop the integration between Navisworks and Sage was rewarding. The developers sought to not change the estimating process, but rather have the process fit the takeoff process. As I provided feedback to the development team, they altered the software to work in the takeoff process rather than changing the takeoff process to fit the software.

What are the remaining inefficiencies in the process that you would like to see worked on next? What additional functionality would you like to see the next generation of tools include?

The largest inefficiencies that are in the process is that estimators are not communicating with the design team to let them know what they need in the model to help with quantity takeoff. There are many complaints about the quality of the models that estimators are receiving, but as I ask estimators if they have told the designers what they need in the model, they go very quiet. We must create a better working relationship between estimators and designers so that estimators can provide quicker and more accurate numbers to the owners. Owners also need to require designers to provide a higher quality model to the contractors.