

It's 4/29/2021 and I have just gotten to the office. It's early in the morning but like any contractors office there are already a number of people hard at work. On the way to my desk I first walk by the cubes of the coordinators that are preparing their models for the day. These early hours are the only time they have to themselves so they make the most of it. The rest of their day will be consumed by meeting with designers, consultants, and subcontractors as they work to virtually build their projects during preconstruction. All parties involved on the project will be working in tandem to create a design that is able to be built straight from the Contract Documents. I notice that they all are using the industry standard procedures as they prepare their model views. I reflect on a time when every project was its own unique challenge and think about how easy they have it now.

I get to my desk and sit down to get to work. My role in BIM has changed drastically from what it used to be. I no longer spend my time on interoperability issues and creating isolated workflows for single projects. Instead I spend my time validating the methods being used through checks and balances all made possible by our use of standardized practices and information exchanges. I monitor the machine and make sure all the gears are well oiled.

After some time going through my morning checks a preconstruction director comes to my desk to discuss a new pursuit. He asks if I can run some numbers on a project. After I gather some quick information from him about the structure type, the size, the facility type, the construction method, and who the other team members are going to be I am able to generate quick square foot costs and time estimates from our database. This data is a combination of past estimates and actual project information that has been stored in one place for proper analysis. BIM has allowed this information to be easily collected through the normal every day processes of our workforce. No double entry is needed. The place where data is used on the job is either the central database or some standardized collector like an IFC. After a few minutes I give the preconstruction director the information he needs to succeed at his meeting.

After lunch I return to the office and walk through the estimator's area. Each estimator is hard at work evaluating models and working on the soft calculations. Very little time is wasted on the mindless task of extracting quantities. The security of using standardized IFC model elements has eliminated the estimator's distrust of models. They all know exactly what they are getting and can easily account for what is there and what is not. The quantities taken from the models are automatically sorted into the Database where the remaining parameters can be filled in to complete the estimate. Rules written into the database serve as the backup to ensure nothing is missed and they keep estimators from deviating from approved methods.

I finish the day out meeting with the corporate executives to discuss the broader analysis results. The constant collection of all of our companies information has allowed the company to understand more about productivity, safety, schedule, cost, manpower, equipment, and every other part of business. The company is making more informed decisions about everything at the top level and that has resulted in the best margins the company has ever seen. As one of the first companies to start collecting and analyzing massive quantities of data they have distinguished themselves from their competitors as a totally different kind of contractor. One that is redefining what it means to build in the time of Big Data. It's a good time to be a Contractor.