

'BIM' is Today's New Buzzword

Jorge A. Calderon

It seems like everybody is talking about BIM lately, which is reminiscent of the days when we transitioned from hand drafting to computer-aided drafting. It wasn't that long ago that "CADD" was the new buzzword. We were all convinced that a simple click of the mouse would transform our drawings from untold hours of hand drafting to drawings that morph into CADD. There is some truth to that statement, however we haven't been able to make the most of CADD to take our efficiency and coordination efforts beyond our two-dimensional mindset. As we transition into this new three-dimensional BIM process, I am once again convinced that it will definitely improve our collaboration efforts and take us beyond the next level.

What is BIM anyway? I remember when the founding partner of our firm

came to me and said, "We need to go out and get this new BIM software." I told him, "BIM is not software, but rather a process to develop an efficient, well-coordinated set of building plans. BIM (Building Information Modeling) is a general term to describe all the information gathered and applied to a building model during design and construction. BIM uses virtual representations of the actual building materials used to build a building. By using this process, we are able to provide information that sometimes can be lost when the project is passed on from the designer to the production team and onto the contractor. This new process can greatly decrease errors made by the production team members by allowing the use of "conflict detection" where the program actually informs the design team members about building coordination conflicts or clashing through detailed computer visualization of each part in relation to the total building. Reduction in time required to complete the construction of a building directly contributes to the cost savings numbers as well to the owner.

A couple of years ago we were interviewing contractors with our client for a midsize retail development. During the interview process, two of the four contractors being interviewed were offering construction management services. They told our client, "As part of our preliminary services we will take your architect's two-dimensional drawings and create a three-dimensional model which will help the team detect any potential conflicts." I was thinking to myself, "Shouldn't we be doing this, aren't we the designers?" However, here are these two contractors being proactive and offering a service in order to minimize any potential change orders stemming from the two-dimensional plans. Since that day, we have been evaluating BIM along with its many benefits and have recently implemented this new process office-wide.

It seems like every contractor, architect, designer, engineer and developer has a basic understanding of this new technology, however it has been around for quite a while, ten plus years as a matter of fact. While BIM is becoming more mainstream



now, it's the larger architectural/contractor firms that are more experienced with this process, and it is now catching on with the smaller-to medium-size firms. Nobody likes change, let alone adopting a new way of developing plans. Since implementing BIM, it has been exciting and nerve wracking at the same time. However, I noticed that this new technology has motivated our staff enough that they have embraced it with open arms.

According to the experts, the retail market will not return to a new normal until 2014. While the market continues to correct itself, many firms are preparing themselves for this new technology in the field of architecture and construction. Slowly, more and more firms are moving toward BIM, and they are beginning to realize the very real benefits that this new process offers. Everyone benefits from BIM, architects, contractors, and the building owners. I wonder what new technology is next on the horizon, "virtual reality?"

From My Perspective
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