

5 biggest challenges in switching to BIM

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BIM, or Building Information Modeling, has numerous benefits above and beyond conventional design systems such as CAD. BIM tracks everything in 3D, incorporates the build schedule, and manages estimation, environmental impact, and long-term facility management.

Sounds great, right? Why wouldn't you want that?

Some who move to BIM may find themselves longing for simpler days. The familiar and predictable nature of CAD, or even hand-drawn blueprints, made them the steady workhorse in industry for decades and for good reason.

One thing that worked about conventional systems of managing project designs was that everyone on the job site was familiar with them. Years of working with the same system made people more adept at working through any

issues with them. While complicated, they have lower learning curves than the more advanced BIM system, which takes every aspect of a project into consideration.

There are numerous challenges to switching to BIM.

1. Additional Training

While it's easy for construction executives to see the benefits, if nobody knows how to use the new system, it won't work.

The training required to learn BIM isn't trivial. Estimates range from months to attain some competency, to years to achieve mastery. Construction companies will likely experience setbacks in productivity before they achieve long-term gains. Those gains are only attainable once a sufficient number of people on the project are proficient with it.

2. Costs

For smaller projects, the extra time required to implement BIM, and the cost associated with hiring specialists to handle it, can be prohibitive.

BIM's cost is more than just its list price. Training, time, specialisation, delays, errors, and more all contribute to the cost of migrating to a new system.

3. Risks

When faced with the option of basing bid estimates on the technology they're familiar with and that which is new to them, construction companies may shy away from it. They know that software tools don't always end up delivering the results you expect within the projected timeline.

There are numerous tools that have come and gone in the construction industry each bringing with them the promise to improve things. Too many leave with those promises yet to be fulfilled. Construction executives know this and are extra cautious to base their entire business on something untested and unproven.

Change takes time, and sticking with tried and true methods is often the safer bet.

4. Planning Process

BIM is great in that it takes many construction project factors into account including timeline, budget, environment, and long-term site maintenance. As a result, designers and project planners must take all these factors into consideration from the beginning, placing more responsibility on project leads to build detailed project models.

5. Slow Adoption

When excel is the tool you know, then excel will often become the tool you prefer to use. You can even use it to manage your entire construction project. It may have its limitations and it may require you to solve problems in less reliable and more tedious ways, but it gets the job done. Adoption of specialised construction management tools, like Linarc, takes a lot of consideration. Once you know a tool, you tend to like it and want to stick with it.

Similarly, moving to BIM requires all members of a project to leave behind the tools



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and systems that they trained on, mastered, and experienced blood, sweat and tears over. It doesn't matter if they expressed frustration at them many times - the former tools are still familiar and comfortable to them. They completed projects and got paid with them. They brought projects from empty fields to

impressive structures with these tools. When you take those tools away and hand them something else, it can be very unsettling.

Adoption of any new process, system, or software solution is always slow. It takes time, training, reinforcement, and encouragement to achieve.

Conclusion

Many construction leaders consider BIM the future of the industry. It solves numerous problems endemic to construction projects including reducing physical and access-related collisions. But its prevalence is progressing at a more measured pace as the many hurdles it faces slow its acceptance.

Ultimately, BIM's success will be related to whether all its benefits truly help companies complete projects faster, more predictably, more cost-effectively, and with fewer errors or incidents. If it does, then companies that don't convert will be left behind.

Government mandates further ensure BIM adoption and set the playing field level for all. The fact that such mandates had to exist speaks to the hesitation in transitioning to it.

Perhaps there are ways BIM's proponents may have eased the transition to BIM to hasten its adoption. It's ironic that while BIM was made to anticipate all the possible challenges that could impede the flow of progress on a job site, the efforts to make its rollout an unhampered success ended in just forcing it through. ■

