

BIM – looking beyond design

Ignite Director Adam Taylor, urges architects to embrace all the possibilities of BIM. Those who don't might just get left behind.

IMAGINE A future where every building we work on is not only designed to be beautiful and sturdy but also avoids going over budget, and running costs and energy usage are kept low long after it's built. One where builders have a say in how a project is designed, infrastructure is built before it's needed, workplace accidents are almost nil and no one has to rebuild something because a client isn't happy.

Sounds like a dream - but those of us using BIM are already one step closer to making it a reality.

Architects not making full use of BIM

The latest EBOSS research shows some architecture firms have already embraced BIM, which is great, but that BIM is used very little beyond the very first stage of design.

The biggest challenge we face as an industry is convincing more people that BIM is not a stand-alone package. Increasingly it's just about using modern technology to deliver building projects, whether we call it computational design or digital engineering.



The Huapai Country Club – its architects made extensive use of BIM, not only for its design capabilities but because it enables cost management and sharing with project partners.

Limiting the use of this technology also limits the benefits we can pass on to our clients and risks the New Zealand construction industry lagging behind the rest of the world. With such a huge range of applications available to us, we can do better.

What the EBOSS study showed was that BIM was being used in the design stages of construction the majority of the time. When it came to structural analysis, however, BIM was used in only 30% of cases and in less than 10% for evaluating a building's energy use and sustainability.

Yet given that we've all been challenged to build more homes for Kiwis, more affordably, more sustainably and more quickly, it makes sense for BIM to become the industry standard.

Taking BIM further

One of Ignite's latest projects, The Country Club, Huapai, in northwest Auckland, illustrates how our partners used BIM collaboratively in a way that goes beyond mere design. We used modelling to plan the overall 6-hectare development of aged care apartments and townhouses, working out the ➤