

DRIVING ADOPTION OF SIMULATION IN THE DESIGN ENVIRONMENT - HOW FAR CAN YOU GO?

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ABSTRACT

Expanding the usage of simulation beyond the traditional analyst is something of a work in progress. The widespread availability, and functionality, of CAD integrated software packages has broken one barrier to wider adoption, but making technology available isn't the same as making it an intrinsic part of the design process. Companies attempting to widen the arc of simulation usage need to decide between enabling the designer and creating an automated approach using something like isight.

If the "enabled designer" route is seen as most appropriate, training is critical to adoption and usage, but delivering standard courses is far from guaranteed to drive what has to be enthusiasm for design by simulation. Essentially there is a disconnect between the designers world view and that of the analyst. Assuming, for example, that the designer is confident to apply even basic solid mechanics and materials science to a design problem is perhaps optimistic, and any training has to at least reinforce the basic concepts in these areas, whilst acknowledging the possibly limited chances of success. Add the current vogue for non-linear functionality in designer's codes and these issues are thrown into sharp focus.

This presentation looks at what is necessary to get designers to adopt analysis into their design process, from properly targeted and delivered training courses to the mentoring which is essential if the usual "tried it once, didn't like it" adoption trajectory is to be avoided. One thing is for sure – if little investment of time, effort and money is made into widening the usage of simulation, minimal returns will be inevitable.

Widening the usage of simulation has many pitfalls and NAFEMS has looked at many of these, in detail, in the past, however sensible implementation plans answer many of these concerns at the outset.

SUGGESTED THEMES

Please suggest any relevant themes / keywords for your presentation.