Can engineers take up the challenge of digital architecture ?

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Abstract

Today architects are increasingly discovering and using advanced CAD software to produce complex 3D shapes for architectural design. The virtual designing of these complex building is one thing, the actual construction is another ballgame. This is a challenge for engineers and contractors.
A direction for a solution can be to digitalize the entire design, engineering en construction process. Like in the aerospace and automobile industry. If all the participants in the design process work together (collaborative engineering) and exchange the 3D information through the entire process, form design to calculation to engineering to manufacturing, it would be possible to control the design process and to produce the complex buildings.
This collaborative engineering and digitalizing of the design process in architecture can also be used to make other building with a complexity apart from the form.
Hybrid buildings for example, these are multi functional buildings to meet the needs of an ever increasing complex urban society.
In this lecture we will present examples of this new digital design process in architecture.