

BUILDERHUB : A BIM TOOL SPECIALIZED IN RC STRUCTURES

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Abstract

Building Information Modeling (BIM) tools are deemed as a disruptive innovation that has transformed the way to plan, design, construct and manage the built environment and will continue to constitute a paradigm shift in the AEC industry. Although BIM has gained popularity in recent years, there have been heaps of complaints on the conventional BIM tools due to their poor cost-effectiveness and limited practicality despite high modeling cost. To overcome the prevailing notion that BIM is a design tool, ChangSoft i&i developed a practical BIM tool called BuilderHUB that can be actually used at the job site and improve the productivity by 200%, save the quantity of rebar by 5~8% and minimize errors and risks. The purpose of this paper is to introduce BuilderHUB's automation, digitization, and recognition technologies that enable users to automatically conduct 3D modeling, rebar detailing, generating error reports, quantity take-off, and base-drawings for shop drawing production.

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