

# Software Breakthroughs Will Lead To Building Smarter

The vision of design, construction and operations data that freely and effortlessly pass from one software application to another without corruption or degradation often is smiled upon as a lovely, but impractical and even unreasonable idea. There are huge hurdles to the concept, yet the payoffs will be so enormous as to completely overcome the obstacles. It only is a matter of time, and that time is coming soon.

Just imagining the customized interfaces such a vision would require and all of the scrambling needed to keep up with software revisions seems to suggest that cross-vendor interoperability is not a practical way to go. Presumably, many developers across the world would need to put aside some of their own economic interests and work with competitors to allow customers to shift data seamlessly to eight, 10 or a dozen independent products during a project's lifecycle.

That is a heady thought, but not entirely unrealistic. There is market dilution when a software developer empowers users to take their data and walk off its electronic turf and onto someone else's. Some fear this will sap incentive from developers of suites of products that strive to serve customers' needs internally. But this cooperation already exists (see p. 14).

In early June, 15 independent software developers in Norway dramatically challenged traditional assumptions with a live and lively pass-around of 3-D building data. They used the International Alliance for Interoperability's open, consensual Industry

Foundation Class organizational structure for building data as the "honest broker." Those 15 used a capability embedded in their software to save the work they were doing, not only in their own proprietary systems, but also as *.ifc* files. They were convincing in their ability to move a project swiftly and frictionlessly from one program to the next across a wide range of functions. These included architectural design; structural, mechanical, electrical engineering; and even permitting, bidding, facilities management and emergency response. The data model passed smoothly through a string of programs that had nothing in common except the ability to save as a *.ifc* file.

Significant field trials, including a design-build-operate hospital project near Oslo are under way and others are planned. Even IAI zealots are starting to talk about their work differently, as if the tide has turned in their direction. They don't talk about "interoperability" so much any more, thank goodness. They are talking instead about "building smart." And that's the best idea yet. ■

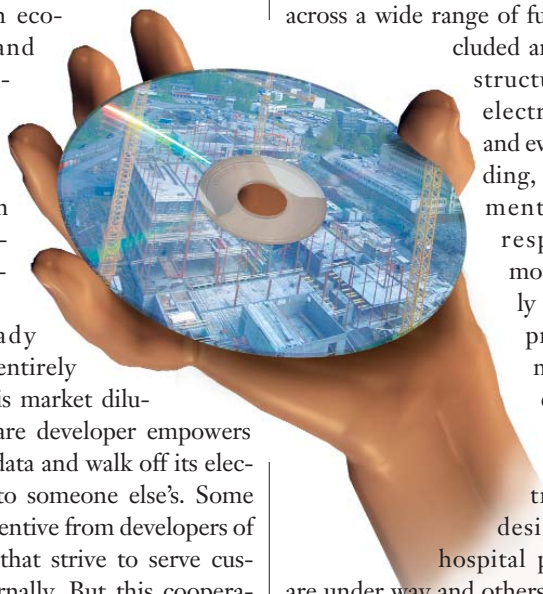


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