

FACE OF THE AIA

## BIM 2011: A Five-year Forecast

by Michael Tardif, Assoc. AIA  
Contributing Editor

**Summary:** Recently, Deke Smith, chair of the National Building Information Modeling Standards (NBIMS) Committee, invited committee members to submit their forecasts for the state-of-the-industry five years hence, to be sealed in a “time capsule” that will be opened in 2011. With an eye on the impact of BIM on business and practice, here are my predictions.



- **Design/construction continuum:** The terms “design/bid/build” and “design/build,” and the contractual relationships that they codify, will both seem increasingly anachronistic, each bearing less and less of a relationship to the way in which design and construction services are actually performed and procured: along a continuum, rather than in defined stages.
- **Less blame:** New types of business arrangements and contractual relationships will emerge that place greater emphasis on achieving desired results and less emphasis on whom to blame if something goes wrong.
- **Fewer liability claims:** The overall number of professional liability claims and the total value of damage awards to plaintiffs due to faulty construction will likely decline compared to historic trends. The decline will be due, in part, to the improved quality of the professional instruments of service (the “deliverables”), but also because courts will begin to place a greater burden on owners and constructors to protect themselves by making use of readily available tools to discover design errors and omissions prior to the start of construction.
- **Quality of information:** The standard of professional care for design professionals is likely to shift from liability for design errors and omissions that manifest themselves during construction to liability for the quality of the information that design professionals create, whether or not it materializes in construction. This will initially cause alarm among design professionals (and their underwriters) unaccustomed to this type of liability, but many design firms quickly will learn to minimize these risks by deploying inexpensive error detection tools and systematic error correction procedures.
- **Diversity and complexity:** The corporate organization of the building industry will become more diverse and more complex. Some firms will become increasingly specialized, while others will become more vertically integrated, offering a broad range



THIS WEEK AT A GLANCE

- HOME
- NEWS HEADLINES
- PRACTICE
- BUSINESS
- DESIGN
- RECENT RELATED
- › Sustainability Is in the Details

MEMBERS SPEAK OUT

SHARE A COMMENT

Tell The Editor

Tell A Friend

REFERENCE

Share your thoughts for the future by writing to the author, [mtardif@aiadc.com](mailto:mtardif@aiadc.com).

This article is based on the author’s independent research and does not in any way constitute endorsement by the American Institute of Architects of any position, product, or service.

For an in-depth presentation of the AIA’s holistic position on integrated practice, visit the [Integrated Practice](#) or [Technology in Architectural Practice](#) pages on AIA.org

of services. Some will become both highly specialized and vertically integrated, offering a broad range of services to specific markets. Paradoxically, the industry will seem far less fragmented, due to an increasing ability to share information reliably.

- **Clearly defined services:** It will become harder and harder to tell the difference between design, construction, manufacturing, and facility management firms, but fears that one segment of the industry will subjugate or even eliminate the other will prove unfounded because the coherence of traditional industry sectors—and their ability to wield power and act in concert—will decline, while the value of specialized knowledge and expertise will increase. The most successful firms will be those able to define clearly the services they offer to their target markets, whatever those services and markets may be.
- **Project-by project partnerships:** The building industry as a whole will begin to look more and more like the film industry (though the analogy is imperfect). Corporate entities as well as project teams will form and dissolve on a project-by-project basis. This is already true on the owner/developer side: Many facilities are built by corporate entities (limited partnerships) specifically created for the purpose of building each facility. Another entity owns the facility (a real estate investment trust), while a third type of entity actually occupies all or part of the facility. The driver at every stage is liquidity and mobility; the ability to convert an asset quickly to cash or relocate operations. This type of single-purpose, single-project corporate entity will become increasingly common in building design and construction, for a similar reason: It will enable design professionals and constructors to make an “end run” around existing, intrinsically adversarial contractual relationships and allow them to leverage their specialized expertise fully to their mutual benefit, rather than withholding or restricting that expertise out of fear of liability.
- **Firms defined by project:** Large design firms will begin to look more and more like large construction firms in their organizational structure: They will have few employees and little equipment of their own relative to their workload and billings, and instead will manage large networks of highly specialized design subcontractors on a project-by-project basis. This will foster the growth of more—not fewer—small, highly specialized design firms able to command a premium for their specialized services.
- **Association adjustment:** Membership-based industry associations will find it increasingly difficult to define their missions and identify their constituencies. Some will radically change their charter or mission; others will fold. New organizations will begin to appear that align more closely with newly emerging business and professional interests.
- **Professional labor shortage:** The shortage of skilled professionals at every level of the architecture profession will become more acute. Institutional inertia will make it very difficult for many schools of architecture to adapt to meet the changing needs of the profession. Some will adapt successfully; others will close. New educational institutions will begin to emerge, unencumbered by tradition and institutional resistance, to satisfy the demand for highly skilled graduate architects qualified to perform at a professional level the first day on the job.

*Copyright 2007 Michael Tardif. Reprinted with permission.*