December 2003

Computing on the Scaffolds: The Coming Transformation of Architecture and Construction with Digital Technologies

Richard Boland
Case Western Reserve University

Jim Glymph
Gehry Partners

Bill Zahner
A. Zahner Company

John King
University of Michigan

Kalle Lyytinen
Case Western Reserve University

Follow this and additional works at: http://aisel.aisnet.org/icis2003

COMPUTING ON THE SCAFFOLDS: THE COMING TRANSFORMATION OF ARCHITECTURE AND CONSTRUCTION WITH DIGITAL TECHNOLOGIES

Chair: **Richard Boland**, Case Western Reserve University

Panelists: **Jim Glymph**, Gehry Partners
                    Bill Zahner, A. Zahner Company
                    John King, University of Michigan
                    Kalle Lyytinen, Case Western Reserve University

We are at the dawn of a digital age in architecture and construction, one of the world's largest industries, and the architect Frank O. Gehry is leading that transformation. The Experience Music Project in Seattle is a recent and advanced example of the undulating forms and complex surfaces made possible by his use of three-dimensional digital representations. Bringing computing to the scaffolds promises to change the work practices, organizational structures, and productivity of all of the actors involved in construction projects, including architects, contractors, subcontractors, and labor groups. This panel will bring together Frank Gehry's senior partner along with a specialty contractor who has worked on many Gehry buildings with two academics who have extensive backgrounds in technological innovations and industrial transformations. The questions they will address are:

- What forces will drive versus inhibit this digital transformation?

- What changes in organization structures will be required?

- What challenges and opportunities will labor experience?

- What actions and policies will help bring fruition to the promised benefits of computing on the scaffolds?

Panelists

Jim Glymph is a distinguished architect and senior partner of Gehry Partners in Los Angeles, who is leading their technology development.

Bill Zahner, President of A. Zahner Company in Kansas City, Missouri, a specialist contractor who is pioneering the integration of three dimensional imaging in metal fabrication.

John King is Dean of the School of Information at the University of Michigan.

Kalle Lyytinen is the Wolstein Professor of Management Design at Case Western Reserve University.