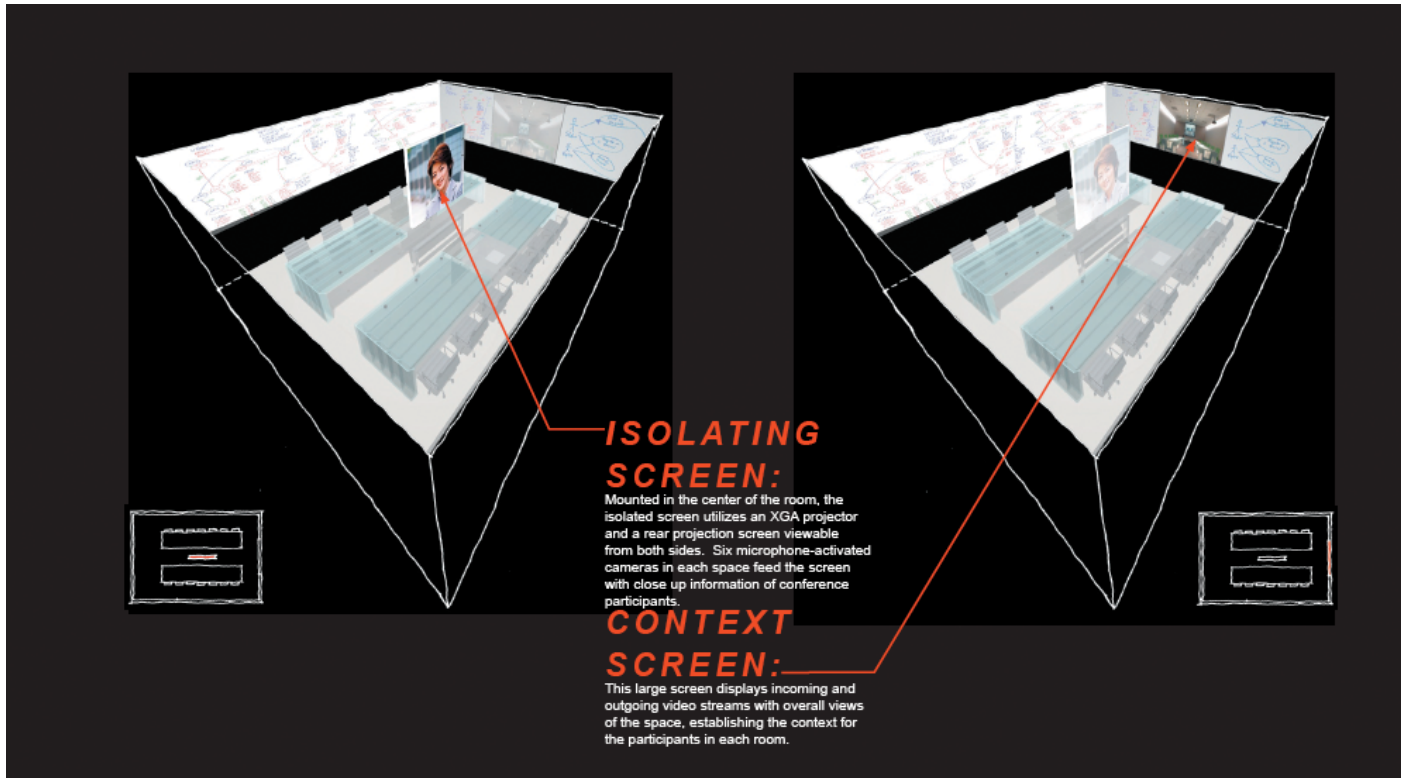




VECTORWORKS CASE STUDY



FACE VALUE: VECTORWORKS ARCHITECT HELPS REINVENT VIDEOCONFERENCING



VECTORWORKS ARCHITECT HELPS NEW YORK CITY FIRM SPAN-STONELY PELSINSKI ARCHITECTS NEUKOMM REINVENT THE STANDARD MODEL FOR VIDEOCONFERENCING.

The existing model for video conferencing does not work effectively. Studies show that up to 90% of communication in a videoconferencing can be achieved in an audio conference. This is because existing models of videoconferencing do not take into account the interpersonal dynamics that spontaneously occur in a face-to-face conference.

The low-resolution, wide-angle view off-the-shelf videoconferencing systems provide an attempt to solve a spatial problem with technology. However, they tend to fall short of capturing subtle verbal and nonverbal communication cues. Clues such as nuances of expression and shifts of attention between various speakers are almost imperceptible and are, consequently, lost in a traditional videoconferencing environment.

New York City firm SPaN (Stonely Pelsinski architects Neukomm) has devised a way to bring them back—with the help of VectorWorks Architect.

Collaborating with McKesson Corporation and Keyspan Energy, Panasonic and Scharff-Weisberg Systems Integration, Inc., SPaN has developed a revolutionary model for advanced teleconferencing facilities nationwide.

GETTING THE WHOLE PICTURE

According to SPaN partner Peter Pelsinski, the firm's design reintegrates the spatial characteristics taken for granted in a face-to-face conference into the videoconference through a radical rethinking of the space of the room itself and through additional layers of functionality.

"Given the complex interactions of space, lighting, cameras and movement, VectorWorks allowed us to test our design both as a simulation of the room itself and as a simulation of how the various cameras and projectors would interact with the participants in the space," explains Pelsinski. "The digital version of the room in VectorWorks allowed us to quickly generate variations to test and refine the relationships within the space."

"As designers, we appreciate the simplicity of the VectorWorks user interface."

An "isolated viewing screen" visually displays the flow of action within conference room spaces. As a person speaks, a microphone activates a camera, which captures a close-up view of the person speaking and projects that real-time image to the isolated viewing screen in both rooms. Much as multiple cameras are used to capture live sporting events or courtroom broadcasts, the isolated view screen renders the "event" of a

videoconference as a series of jump cuts, enabling conference participants to easily track the dialogue and activities of a conference as they unfold.

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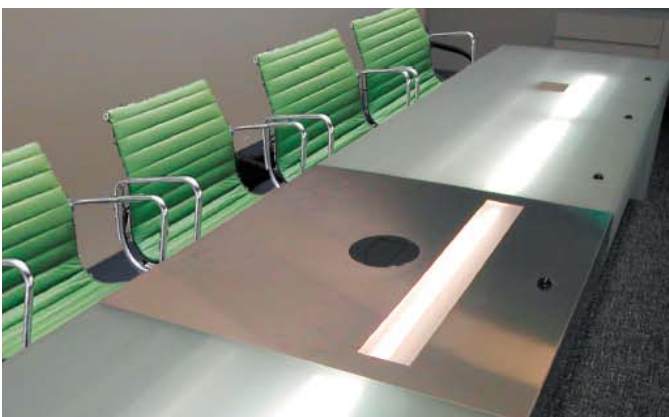


UP CLOSE AND PERSONAL

The creation of this augmented view requires a rethinking of the traditional conference table configuration. The table is "split" in two, allowing for the isolated viewing screen to be centrally located in the sight line between participants. All conference participants, real or video, face each other across the table just as they would in a traditional conference.

The tables are fabricated of cast resin and provide continuous data cable management, with the table itself acting as a plenum for existing and future technologies. The table incorporates digital connectivity, as well as a lighting system to provide "fill" light on participant's faces during a videoconference. Microphones for each participant are embedded in the table surface as well.

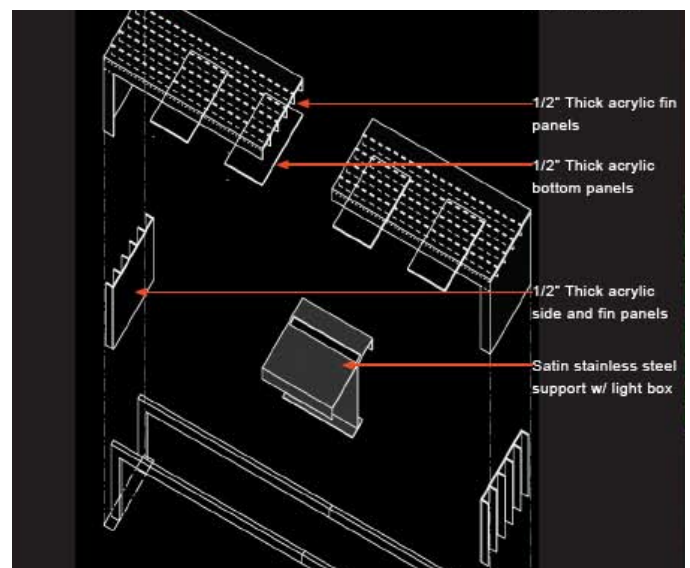
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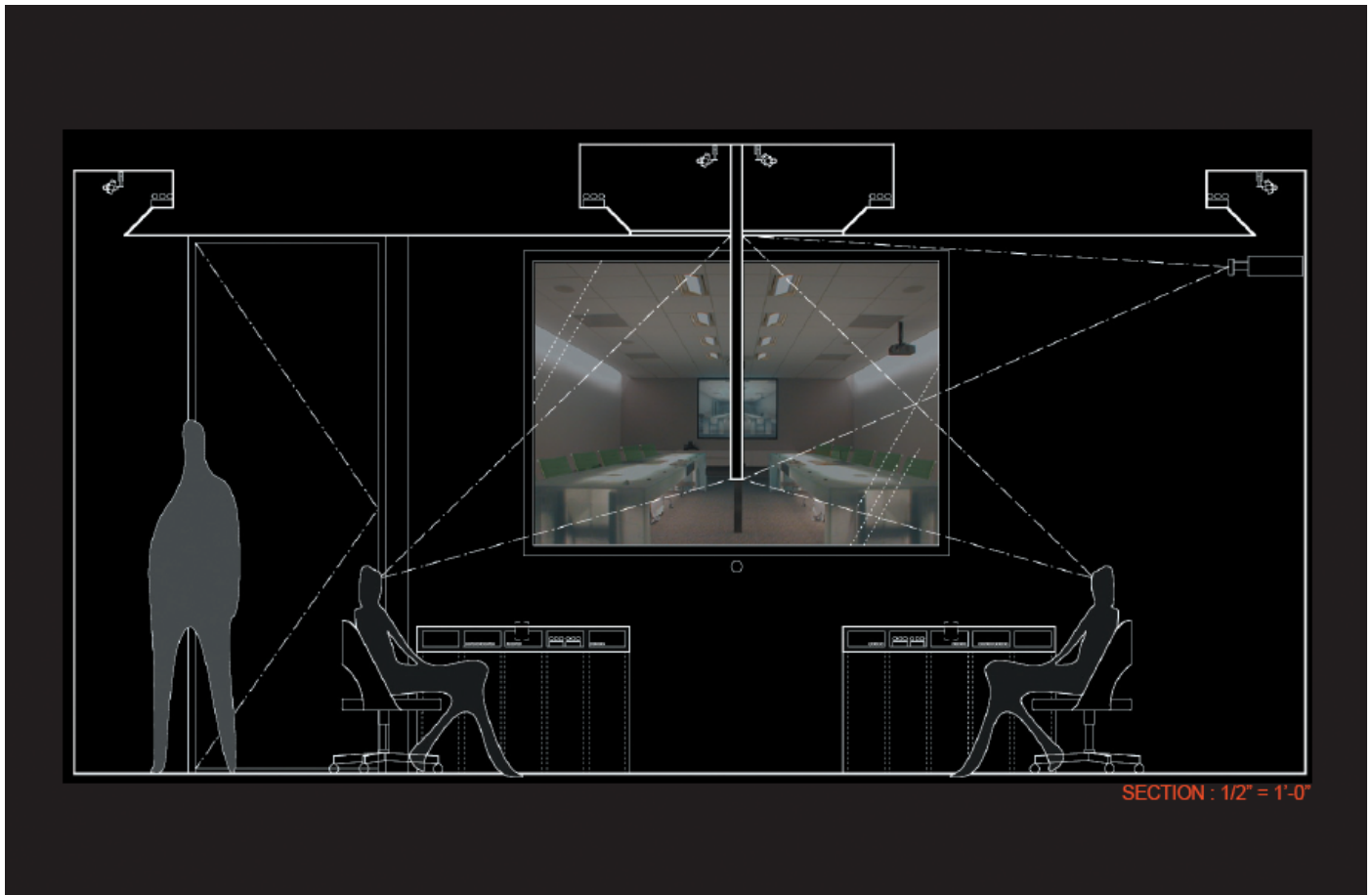


Mounted in the center of the room, the isolated screen uses an XGA projector and a rear projection screen viewable from both sides. Six microphone-activated cameras in each space feed the screen with close-up information of conference participants.

A large wide-view context screen displays incoming and outgoing video streams with overall views of the space, establishing context for participants in each room.

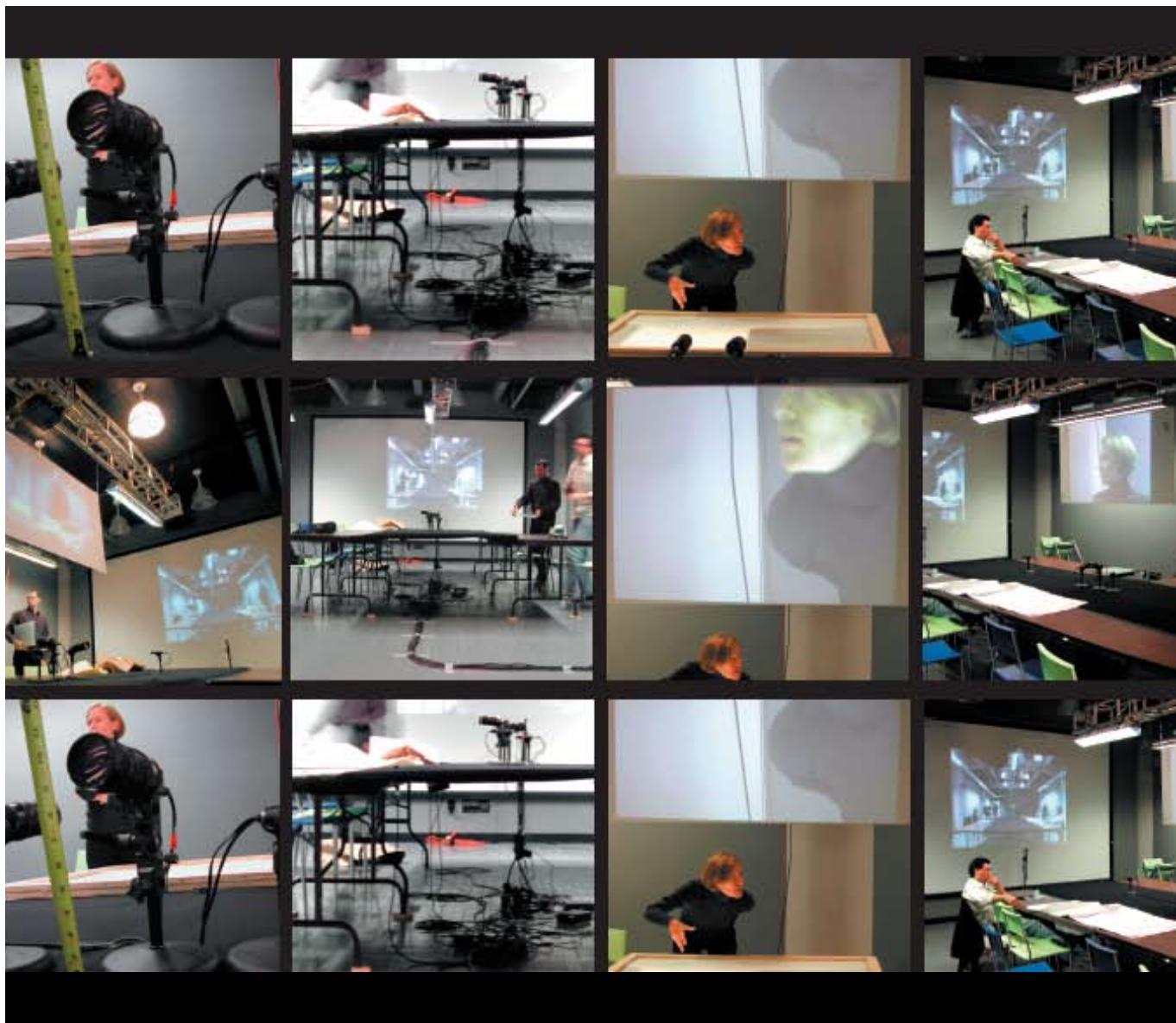
Cameras are hidden in a "perch" mounted below the isolating screen. The cameras are obscured, reducing the perception of their "invasive" presence. The room's walls are constructed of a dry-erase surface. The information written on the wall surface can be photographed and reprojected into another room in the same location.





VECTORWORKS MEETS A MULTITUDE OF NEEDS

"We appreciate well-made things, and VectorWorks Architect is a more elegant piece of software to work with in many respects than other CAD packages, says Pelsinski. "As designers, we appreciate the simplicity of the VectorWorks user interface. We also appreciate VectorWorks' 'all-in-one' ability to serve as our primary design tool—doing 3D modeling, rendering, etc.—and as our primary production tool—for design development drawings, CDs, and so on,



eliminating the need to go to another program.”
He continues, “VectorWorks Architect plays well with other CAD software. We are able to communicate seamlessly with our AutoCAD consultants.

“It is almost enough that we still enjoy making beautiful drawings,” Pelsinski concludes. “Despite its sophistication, VectorWorks Architect still lets us do that.”

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