SMART Story



Construction project gains efficiencies Using SMART Board[™] interactive whiteboards for multidisciplinary collaboration



The integrated project team works collaboratively on virtual designs using SMART Board interactive whiteboards.

"Our collaboration in the big room is leading us to produce a much better coordinated design."

Atul Khanzode, DPR's director of virtual building

The University of California, San Francisco (UCSF) Medical Center at Mission Bay will open a children's, women's specialty and cancer hospital in 2014. The project team includes DPR Construction (DPR) as the general contractor.

DPR prides themselves on the collaborative spirit they bring to their working relationships with clients. Atul Khanzode is DPR's director of virtual building, and early in the planning stages for the project he helped gather the key players to determine how best to optimize workflow as an integrated team. "We needed to define how we were going to work together using technologies to help us virtually build the project using building information modeling," says Atul. The multidisciplinary team decided to create an on-site integrated center for design and construction where all members would work together.

What set this scenario apart from typical construction sites is the "big room" – a large, central conference room that houses multiple SMART Board interactive whiteboards. The interactive whiteboards' touch-sensitive displays connect to computers and projectors, enabling people to control applications directly from the displays, write notes in digital ink and save completed work.

To kick off the project, DPR arranged a workshop for all team members with the faculty at the Stanford Center for Integrated Facility Engineering. "People were initially skeptical," said Atul, as he explained that the approach of producing virtual designs, coordinating everything and getting everybody to sit in a big room felt foreign to a lot of people.

Now that the project is underway, the team has been conducting quarterly surveys with the participants. The results show that the team members find working with SMART Board interactive whiteboards helps them "solve problems quickly and they're able to easily involve people that need to be part of the process," says Atul. Team members collaboratively make changes to drawings in real-time. They use Autodesk[®] Navisworks[®] software products to view and dynamically write over the project and review 3D design data created by products like AutoCAD[®] and Revit[®].

"This opportunity to explore and resolve pain points in a virtual environment ahead of time will have a direct impact on how smoothly construction will go," says Atul.

As an added benefit, Atul notices that people gain a better understanding of each discipline's contribution. "When everyone sees the impact that changing something in one spot has on other areas – it gives everyone an appreciation for what each person is bringing to the project," says Atul.

DPR is using a similar collaborative approach on several of their projects to streamline communication, make decisions more quickly and detect potential problems early so they can be resolved before construction begins. All of these factors come together to enhance DPR's project delivery and the value they deliver to the customer.

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