

Bluescape Expands BIM Principles to AEC for Integrated Project Delivery

Overview:

A full-service design firm specializing in commercial buildings recently began utilizing Building Information Modeling (BIM) cloud-based software to manage and execute complex architecture, engineering, and construction projects. Thanks to BIM, they’re benefiting from better information integration and sharing.

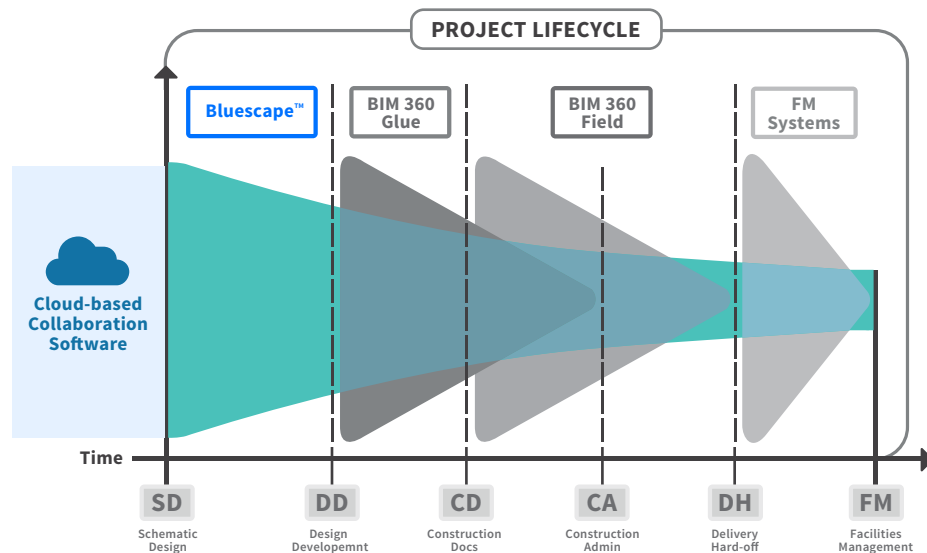
However, these new tools haven’t substantially improved their ideation and iteration processes, which require active, real-time sharing and an open work style that fosters creativity and collaboration.

“With Bluescape and BIM, every part of our process has been accelerated — team members can contribute earlier and solve problems faster.

“Bluescape facilitates our creative exploration and collaborative problem-solving processes, complementing our BIM.

“Together they deliver the insight and efficiency we need to move with quickness and assurance for IPD.”

– Project Architect
AEC firm



The Situation:

The schematic design process begins with sketches and rough models for ideation. Once a concept is selected, the design team moves into BIM, creating 3D architectural and structural building models. The models are shared with engineers and other contributors, who enhance them with discipline-specific content. The teams review the new contributions, highlighting potential issues and noting questions. Issues are reviewed and updates made cyclically until models are complete and accurate. Contract documents and 4D schedules are produced from final models.

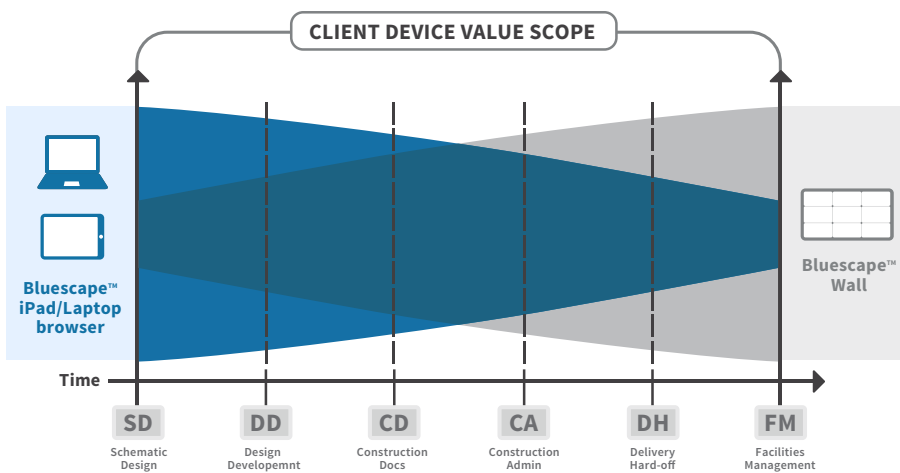
However, since the early ideation process occurs outside of BIM, they have no way to fully document the concepts, background, or comments. In the modeling process, reviews, questions, and updates occur by moving content back and forth between teams, instead of resolving issues collaboratively.

The Need:

While BIM had accelerated the building process with more complete and accurate project information, it had less of impact on creative ideation and active problem solving.

Concept Consolidation: If they could apply BIM principles of information consolidation to ideation, they could generate more complete concepts earlier. They needed a way to consolidate concepts, background, and comments so designs could evolve more quickly and intelligently.

Accelerate Iteration: In the design development phase, they still faced technology hurdles for issue identification and model updating. They needed a way to bring people and content together in real time to solve problems more quickly through collaboration.



The Bluescape Solution:

Designed to complement their BIM solution, Bluescape provided the firm with a digital collaborative workspace to facilitate ideation and sharing, as well as a large-scale visualization of plans and detailed 3D models through multi-touch HD displays.

Visioning Sessions: Projects now begin in Bluescape, a cloud-based service, where designers sketch, upload inspiration images, mark up concepts and conduct visioning sessions internally and jointly with clients. Bluescape's freeform hand-drawing tools – available through multi-touch wall displays and the iPad app – and the digital workspace affords them the freedom to explore concepts quickly while unleashing creativity in their natural drawing style.

Client Presentations: All the stakeholders, including the client, are now engaged in the interactive design process that was never possible before. Designers visualize, compare, and modify sketches in a single workspace. Sketches and comments are automatically preserved for review, collaboration, and documentation at any point later down the road.

Working Sessions: Once they move into modeling in BIM, Bluescape becomes an active collaboration tool. In-house teams meet around the Bluescape wall, exploring the models at large-scale for detailed analysis. Contributors at their desks, on the building site, and in other offices participate through the iPad and web applications.

With Bluescape, they can now solve issues in more efficient collaborative digital working sessions. In a single meeting – virtual or in-person – the entire team can come together with simultaneous access to their Bluescape workspace to highlight issues and address them together for real-time review and resolution.