



Industry: All Infrastructure markets
Product: Bentley Navigator and Navigator Mobile
Users: Multiple
Country: Multiple

November 2, 2015

More than 85 *Be Inspired* Nominees Advance Model Review Workflows with Bentley Navigator and Navigator Mobile

In order to improve multidisciplinary coordination and leverage design models to improve safety during construction and operations, leading design and construction organizations turned to Bentley Navigator and Navigator Mobile to enable stakeholders in the office, on-site and in the field to gain clearer insight into design models.

More than 85 of this year's *Be Inspired* nominees relied on Navigator to successfully identify and resolve design coordination, scheduling, and safety issues on their multi-discipline projects throughout the world. By leveraging the rich information in design models for design and construction review in the office and field, they have significantly reduced errors and project costs, compressed delivery schedules, and improved the safety of the built assets.

As an example, SEI Engenharia de Projectos was able to prevent accidents on their Mina Salobo project by improving the ability to identify safety issues using Navigator on a single shared model for all disciplines. This capability allowed the safety engineers to perform design reviews of the project in a broader perspective across multiple disciplines, exemplified by a 50-70 percent increase in the number of clearly identified safety issues like pipes, cable trays, and equipment that prevented escape routes.

Many teams observed that multi-discipline project collaboration was improved significantly with the ability to detect and eliminate collisions between different disciplines during the design process. On the Shanghai SK Building, the Beijing Institute of Architectural Engineering Co., Ltd detected 50,000 collision points between the stiffened steel structure, electromechanical and equipment installation disciplines by using the clash resolution capability of Navigator.

The teams working on the *Be Inspired* nominated projects indicated that they sped confident decision making with widespread access to project models. Regarding Navigator's schedule simulation capability, Roman Tokarenko, IT director at JSC Trest Gidromontazh, remarked, "Bentley Navigator is a modern replacement of a Gantt chart as a visualizer of network schedules."



Organizations across the world are discovering ways to reduce construction waste to deliver projects more efficiently. On the Digital Engineering Practice of Ningbo Yongxin Sluice and Pump Station project, the Shanghai Investigation, Design & Research Institute calculated that with Bentley Navigator, the project errors and omissions were reduced, and design quality was improved with a 95 percent reduction in error rate, thus lowering project construction costs.

Image Link: <https://www.hightail.com/download/bXBZNHAXT01oMlhMYnNUQw>

Caption: SEI Engenharia Mina Salobo project

Image Link: <https://www.hightail.com/download/bXBZNHAXT01CTWxqQThUQw>

Caption: Navigator is used to conduct coordination reviews

Image Link: <https://www.hightail.com/download/bXBZNHAXT01Fd2NsYzlVag>

Caption: Navigator provides the ability to develop visual reports based on embedded model information

Image Link: <https://www.hightail.com/download/bXBZNHAXT01ubVh2WnNUQw>

Caption: Navigate immersively through models

Image Link: <https://www.hightail.com/download/bXBZNHAXT01IM1JESjhUQw>

Caption: Quickly find what you need with powerful query capabilities