Bentley Systems and Microsoft Join Forces to Advance *Connected Data Environments* for Infrastructure Projects and Assets

*Azure and Bentley Success Plans Accelerate “Going Digital”!*  


During Conference keynotes, Bentley and Microsoft discussed the advancements made possible through their partnership and some of their future priorities working together. CEO Greg Bentley offered user organizations Bentley’s *Success Plans* for “Going Digital” through Azure to ensure that “BIM potential” created through digital engineering models can be fully realized in infrastructure project delivery and asset performance. The Azure-provisioned *connected data environment* experiences and benefits realized by Crossrail, Shell, Maryland State Highway Administration, and Mott MacDonald were cited.

The next step for *connected data environments* is to enable business- and operational-intelligence analytics to have *open* and *live* access to information within digital engineering models in order
that “ET” (engineering technologies) can be brought to bear with “IT” and “OT” (operational technologies) to improve the throughput, safety, and reliability of infrastructure asset performance.

David Epp, director, global ISV alliances, Microsoft Corporation, described Microsoft’s advancements and potential contributions. Epp said, “One of Microsoft’s key priorities is supporting our partners. We are pleased that Azure is a core component of Bentley Systems’ connected data environment for infrastructure engineering organizations “going digital.” Specific cases such as Crossrail, Shell, Maryland SHA, and Mott MacDonald illustrate this active collaboration. We consider Bentley a leader in technical software, taking full advantage of our growing set of Azure services. We currently record over 100 trillion objects in Azure Storage. We are leveraging this power as well as other capabilities to help Bentley enhance connected data environments to deliver more value through new technologies and innovations. Through our newest Cognitive Services—from PowerBI to Cortana analytics and deep learning—we hope to help accelerate the realization of the ‘BIM potential’ for Bentley users’ digital engineering models. We are proud that Azure can play a strategic role in the advancement of infrastructure project delivery and asset performance through advanced Bentley solutions.”

**Azure and Bentley Success Plans**

Azure underlies Bentley’s Success Plans for user organizations. Azure and CONNECT Edition hybrid environments enable engineering organizations to virtualize their talent—with work-sharing for project delivery and through innovations such as inspectioneering for asset performance. By the same token, Azure cloud service connections enable Bentley Systems to virtualize the contributions of its own professionals anywhere in the world to users’ environments and projects. Enterprise Success Plans can make ProjectWise and/or AssetWise systems administration and ongoing project provisioning the responsibility of dedicated Bentley experts. Project (or Business Unit) Success Plans can virtually embed Bentley engineering-credentialed application experts within major projects or business units to introduce and propagate best-practice BIM advancements, through shared resources including Automation Center, Components Center, and Optioneering Center. With service levels responsive to an
organization’s business objectives and project outcomes, *Success Plans* accelerate “going digital.”

**Crossrail**

Crossrail is Europe’s largest construction project, now completing its tunneling and stations under and across London on time and within budget. Crossrail’s “connected data environment,” based on Bentley’s eB technology, manages its engineering and asset information and provides a complete, federated view of its “digital railway.” Designed in a BIM virtual environment integrating over 1 million assets, it connects documents and drawings with Bentley’s comprehensive modeling software. In June of this year, to ensure continuity from construction to operations, Bentley upgraded Crossrail’s *AssetWise* environment to an Azure cloud service. Crossrail’s BIM successes are regarded in the United Kingdom as an exemplary case study in “going digital.”

**Shell**

Shell, with a Finalist project—Visibility into the Path of Construction for Prelude FLNG—in the *Innovation in Construction* category, is leading the energy industry in developing innovative ways to improve the affordability of capital projects. Shell selected *ProjectWise ConstructSim* to enhance its ability to visually plan and execute work safely, to ensure more effective “engineering readiness” through the application of advanced work packaging to improve constructability, and to improve field productivity. *Shell chose to provide ConstructSim to its supply chain through an Azure-provisioned cloud service to help its EPCs, implementing the Construction Industry Institute’s Advanced Work Packaging recommendations, in “going digital.”

**Maryland State Highway Administration**

A Special Recognition Award Winner in *Advancing Asset Performance Modeling*, the Maryland State Highway Administration’s Motor Carrier Division benefits from a Bentley *Success Plan*
for its *Maryland One System* for the statewide management and issuance of Oversize/Overweight permits to carriers moving loads through the state. Bentley’s *Success Plan* provides a reliable, high-performance environment, limits infrastructure costs while enabling continuous improvement, and allows Bentley implementation experts to directly manage the system. About the advancements of “going digital,” Tina Sanders, technical support manager, Maryland State Highway Administration, Motor Carrier Division, said, “Our new Bentley *Maryland One System* allows carriers anywhere in the world to use any device and browser to apply for Oversize/Overweight permits 24 hours a day, seven days a week, and have them routed, analyzed, and automatically system-issued up to configurable thresholds. We are confident that all clearances are checked, every bridge crossed over is structurally analyzed, and all temporary conditions are considered. This is now done across the state, regardless of jurisdiction, through one single application, while still giving each agency total responsibility and flexibility to manage their road and bridge assets and review processes.”

**Mott MacDonald**

Mott MacDonald, with two finalists projects this year—a water sector project in the United Kingdom in the *Innovation in Project Delivery* category, and the FLO JV Northern Line Extension project in London in the *Innovation in Rail and Transit* category—is advancing its strategy through Bentley’s ProjectWise CONNECT Edition and Azure.

Mott MacDonald is taking advantage of Bentley Systems’ *Cloud Services Subscription* program at enterprise level. Key to Mott MacDonald’s GoDigital strategy is connecting its people through Bentley’s *connected data environment* in which Bentley and Microsoft are cooperating. Mott MacDonald is working with Bentley, Microsoft, and Deltek as partners for its enterprise-wide GoDigital strategy.

**About Bentley Systems**

Bentley Systems is a global leader in providing architects, engineers, geospatial professionals, constructors, and owner-operators with comprehensive software solutions for advancing the
design, construction, and operations of infrastructure. Bentley users leverage information mobility across disciplines and throughout the infrastructure lifecycle to deliver better-performing projects and assets. Bentley solutions encompass MicroStation applications for information modeling, ProjectWise collaboration services to deliver integrated projects, and AssetWise operations services to achieve intelligent infrastructure – complemented by worldwide professional services and comprehensive managed services.

Founded in 1984, Bentley has more than 3,000 colleagues in over 50 countries, more than $600 million in annual revenues, and since 2009 has invested more than $1 billion in research, development, and acquisitions.

Additional information about Bentley is available at www.bentley.com. For Bentley news as it happens, subscribe to an RSS feed of Bentley press releases and news alerts. Visit The Year in Infrastructure Conference website for information on Bentley’s premier thought-leadership event. To view a searchable collection of innovative infrastructure projects from the annual Be Inspired Awards, access Bentley’s Infrastructure Yearbooks. To access a professional networking site that enables members of the infrastructure community to connect, communicate, and learn from each other, visit Bentley Communities.

To download the Bentley Infrastructure 500 Top Owners ranking, a unique global compendium of the top public- and private-sector owners of infrastructure based on the value of their cumulative infrastructure investments, visit BI 500.

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