The *Year in Infrastructure* and *Going Digital Awards* Breakout Sessions

BENTLEY ACCELERATION INITIATIVES

Title:
Key Industries Adopting Evergreen Digital Twins and Real-Time Asset Performance Optimization

Session Abstract:
Digital twins are being adopted in various infrastructure assets around the world. Being comprised of operational, engineering, and information technologies, owner-operators are finding immediate value in the digital twins' ability to streamline operational workflows.

The addition of real-time monitoring through IoT sensor data further empowers decision makers with critical insights on the performance of their assets. This has been especially apparent in the areas of telecommunication structures and transmission power lines, where issues with vegetation management, tenancy availability, and inspection have been costing owners billions of dollars in lost revenue and decreasing the efficacy of their services to the general public.

In this session you will learn how Bentley's strategic investment fund and incubator, Bentley acceleration initiatives, is facilitating the creation of evergreen digital twins within the telecommunications and overhead utilities industries through their portfolio including, OpenTower IQ, PLS and infrastructure IoT.

COHESIVE

Title:
Delivering Real Value from your Digital Twin – how Cohesive drives transformational outcomes for your business, assets, and the world

Session Abstract:
Cohesive partners with its clients to bring the power of data and process together, using digital twins as a foundation for decision-making, and expanding the value through thoughtful strategic advice and alignment of people and technology. We use artificial intelligence and the latest digital solutions to transform the way assets are designed, constructed, operated and optimized to help you overcome the most complex business challenges. Together we build assets, businesses, and cultures for better long-term sustainable results.

In this session, we will introduce Cohesive, why we are on a mission to drive better outcomes for a better world, and how we achieve transformational outcomes by supporting our clients through the full asset lifecycle.

SEEQUENT

Title:
Does the hidden world of the subsurface hold the answers to solving some of the world's most complex economic, environmental, and humanitarian challenges?

Session Abstract:
When you need to get a clean supply of drinking water to over a million refugees in Bangladesh, find a way of developing wind and geothermal energy renewable sources faster and more reliably, mitigate the geo-risk on the 167.5 million structurally deficient U.S. bridge crossings, or even enable Singapore to build a whole city underground – then you need to be able to understand the full subsurface picture in 3D. The subsurface comes with huge uncertainty and complexity and we have to be able to connect that with the built world above to drive toward these audacious global sustainability goals.

Hear from us and some of our heroic geo-professionals who are truly making a difference in how our software connects teams and data — leading to a better understanding and ultimately better decisions for people and the planet.

BENTLEY RESEARCH

Title:
Research Imperatives: Inclusion, accessibility, and improving the quality of life.

Session Abstract:
Digital twins can enable research for public good, which in turn influences policy and practices that move us closer to sustainable development goals. Bentley Research is contributing by laying the data-driven foundations for digital twins of campuses, as microcosms of cities, to explore pathways for improving the quality of life.

In this session, you will hear from partner universities in Dublin and Kaunas, on how they are using co-created digital twins to support a clean energy transition, improve the overall campus environment, and create more accurate air quality models by federating real-time data. You will also receive an overview of diverse projects in our research portfolio. For example, our most recent Ph.D. at Cambridge University is evaluating the metaverse as a prototype for the visualization of, and interaction with, expressway digital twins.