Digital Twins in the Process Industry

Think Big, Prove Small, Scale Fast

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Context

Lack of **line of sight** puts you and your company at **risk** because you cannot make decisions without accessible, trusted, and up-to-date information. Yet, disconnected data and organizational silos are rampant, and adoption of IIoT has amplified this problem.

Data silos are a symptom of poorly connected systems, resulting in wasted time and resources, poor decision making, missed opportunities, and duplication of effort.

Process industry leaders have turned to digital twins to connect data, systems, and people in an accurate and immersive visual context for digital line of sight.

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> *Leading industrial companies are succeeding in their digital transformation by following the lead of CEOs, CIOs, and CDOs, pursuing multiple transformation initiatives in parallel, focusing on data and becoming data-driven.*
>
> -Greg Gorbach, Vice President, ARC Advisory Group

Think Big

Thinking big means envisioning digital twins as the foundation of your going digital strategy to integrate the virtual and real worlds. Digital twins enable true collaboration between engineering, operations, and maintenance.

You can gain analytics visibility for actionable insights to make fast and accurate decisions – and deliver safe, reliable, compliant, and cost-effective service to your customers.

The end game: sustainability at the lowest total cost of asset ownership, reduced risk, improved operational performance, boosted resiliency, and increased safety.

> *Linking the physical and digital worlds could generate up to $11.1 trillion a year in economic value by 2025.*
>
> -McKinsey

Prove Small

Proving small means showing bottom line improvement in a small implementation of your digital twin.

You can quickly start building your digital twin from the sources of data and information that you have in place today. Our open interoperable environment allows you to combine engineering models from any source and connect your data and systems.

Our patent-pending machine learning techniques can be used to speed up the creation of your digital twin. Turn dumb documents into intelligent sources of up-to-date information easily accessible in the twin. It can take less than a day to capture a photorealistic reality model to enable an immersive visual environment for collaboration between engineering, operations and maintenance.

The result: a unified digital twin environment accessible by all and kept evergreen with Bentley's unique change management capabilities.

> *The deployment of Bentley solutions gives me the assurance that we have the right tool in place to enable easy access, and to manage and maintain the integrity of our information, in support of safe and reliable operations.*
>
> -Dave Campbell, COO and VP Operations, BP Oman

Scale Fast

Proving small quickly leads to scaling fast.

Scaling fast is made possible by the PlantSight digital twin solution jointly developed for the process industry by Bentley Systems and Siemens. Bentley and Siemens have combined their technology and expertise to accelerate the digitalization of plants and infrastructure across the globe.

Organizations that move with urgency to drive a digital strategy throughout their businesses will define the industry's future. Open and connected digital twin solutions will be key to future competitive advantage, as well as fuel growth and profitability.

Our users prove small by solving a problem, then scale fast using a common deployment process that unlocks benefits more quickly and drives standardization and operational flexibility.

**-Alistair Stubbs, Vice President,
Asset Information and Reliability, Bentley Systems**

30% improvement in workforce productivity

10-25% reduction in unplanned downtime

Millions saved in reduced operating costs

Reduce risk, improve safety and environment integrity
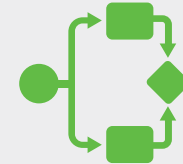
Why PlantSight?

Digital Line of Sight

From asset insight to operational foresight to business oversight, digital line of sight reduces risk across every level of the organization for triple bottom line sustainability (people, planet, and profitability).

Data-driven Decision Making

Connect interrelated asset data. Leverage IIOT, advanced analytics, artificial intelligence and machine learning to gain actionable insights into asset performance and integrity.

Situational Intelligence

Visually check what and where your assets are and see how they are performing. Know what to do and when to improve the integrity and performance of operating assets.

Open Interoperability

When non-proprietary open standards are utilized, interoperability between data sources and endpoints are assured without any limitations and at a fraction of the cost of the alternatives.

Flexible Scalable Deployment

Access your digital twin from anywhere with cloud services. Optionally deploy with mobile, augmented or mixed reality. Remote working and remote collaboration have never been easier.

Evergreen

Know information is always up-to-date and trusted. See who changed what and when with easy access to a timeline of changes. Track and manage changes to models, documents and data.

Why PlantSight?

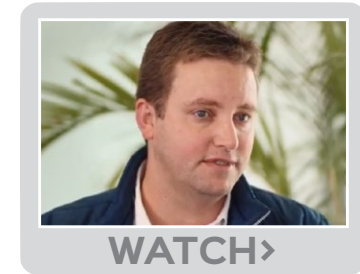## Hear What Users Are Saying

WATCH›

"Look at the digital twin not through the lens of technology but through the lens of the day-to-day operation. Digital twins provide a unique level of transparency on what and how work is being done. They align with operational goals to improve safety, reliability and uptime; reducing risk while reducing costs."

-Josh Etkind,
Digital Transformation Manager,
Shell Deepwater

WATCH›

"We reduced ramp up time from 6 months to 1 week at a refinery... and the digital twin shaved 20 days off a shutdown schedule."

-Randy McMeekin,
Global Managing Director,
Engineering, Hatch

WATCH›

"Digital twins have changed the way mining operations see their data. We want to give them that picture, accurately, safely and quickly."

-Christopher Clark,
Managing Director, RocketMine

Get Started Now

1 **Set an executive level meeting**

Set a date for a meeting with a Bentley executive that can help you get started quickly.

Set a date >

2 **Attend an executive roundable briefing**

Register to attend this executive level discussion on how you can gain a competitive advantage by speeding up your digitization plans partnering with Bentley.

Sign up now >

Got a question? Ask an expert >

PlantSight

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Contact Us Now ❯   **Visit Us Online ❯**

About Bentley Systems Bentley Systems (Nasdaq: BSY) is the *infrastructure engineering software company*. We provide innovative software to advance the world's infrastructure – sustaining both the global economy and environment. Our industry-leading software solutions are used by professionals, and organizations of every size, for the design, construction, and operations of roads and bridges, rail and transit, water and wastewater, public works and utilities, buildings and campuses, and industrial facilities. Our offerings include *MicroStation*-based applications for modeling and simulation, *ProjectWise®* for project delivery, *AssetWise®* for asset and network performance, and the *iTwin®* platform for infrastructure digital twins. Bentley Systems employs more than 4,000 colleagues and generates annual revenues of more than $800 million, in 172 countries. www.bentley.com

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