Every industrial facility is characterized by cumulative data evolution. Massive quantities of asset data are generated throughout all phases of the asset lifecycle. This data is spread over a multitude of software applications, databases, and paper files throughout the enterprise and at site. As a result, the information available to decision makers is often inaccurate, out-of-date, incomplete, inconsistent, and/or poorly synchronized. Low-level data integration only tells part of the story, creating challenges and inefficiencies that can lead to the wrong decisions being made, and in some cases major damage.

Siemens has been engaged with Bentley Systems in a strategic alliance based on their highly complementary software portfolio with the goal to extend opportunities for deeper data utilization and make digital twins even more efficient. The result of this collaboration is PlantSight.
Managing Dark Data
PlantSight is an open-architecture, cloud-based solution that delivers a collection of microservices including process and plant engineering, physical layout modeling, project and construction planning, maintenance, and asset performance modeling. It also supports federating data from underlying services and related applications to eliminate data duplication and its implied latency within the solution architecture.

The solution provides access to traditionally inaccessible data, through intelligent scanning and interpretation. Services to validate data and link it to other information, combined with change tracking, improve the degree of accuracy, completeness and trustworthiness of asset data and documentation, enabling better and faster decisions.

PlantSight brings all asset information together, contextualizes it, validates it, and visualizes it. It transforms raw data into a comprehensive digital twin. It provides one complete digital twin that is continuously updated, faithfully emulates its physical counterpart both in behavior and informational context and empowers users with the information they need to know what to do next. Whether you are a site manager, operator, engineer, or operations manager of a plant, you will benefit from reliable and updated information.

Visualizing the Digital Twin
This new approach from Siemens and Bentley represents a key step towards the process industries' top priority in 'going digital'—the digital twin enablement of their operating plant engineering, without disruption to their existing physical or virtual environment.

Simply put: PlantSight opens your eyes to insights; invaluable insights that will help you discover possibilities, make informed decisions faster, and drive the profitability of your plant in the long run. All with just one, simple, easy-to-access web portal. PlantSight is a portal through which you can see past 2D and 3D visualizations to the information and connections behind. Conversely, PlantSight also enables you to see past pure data to understand how it all comes together in a visual form; always from the right perspective, anytime, anywhere.