Discover SYNCHRO
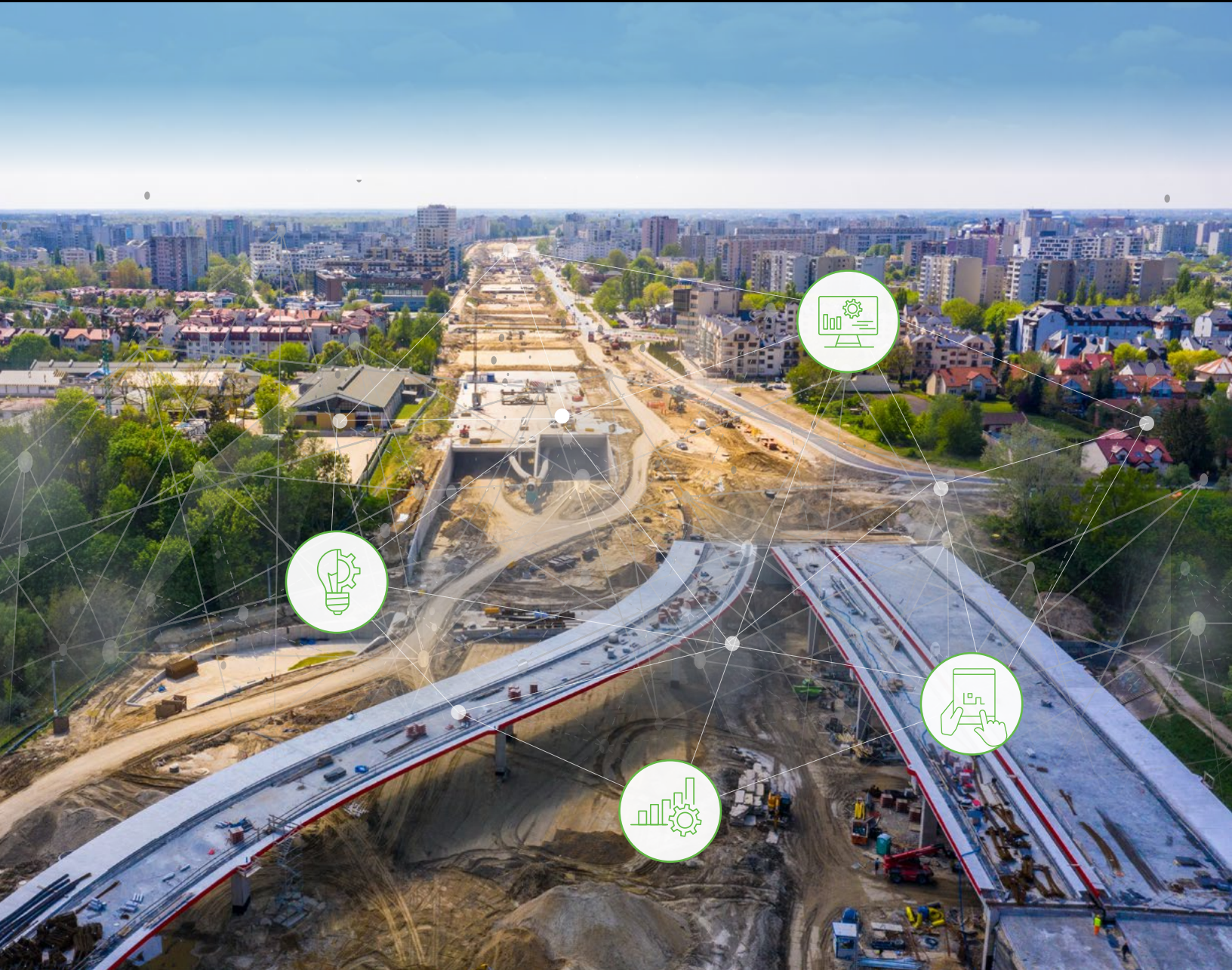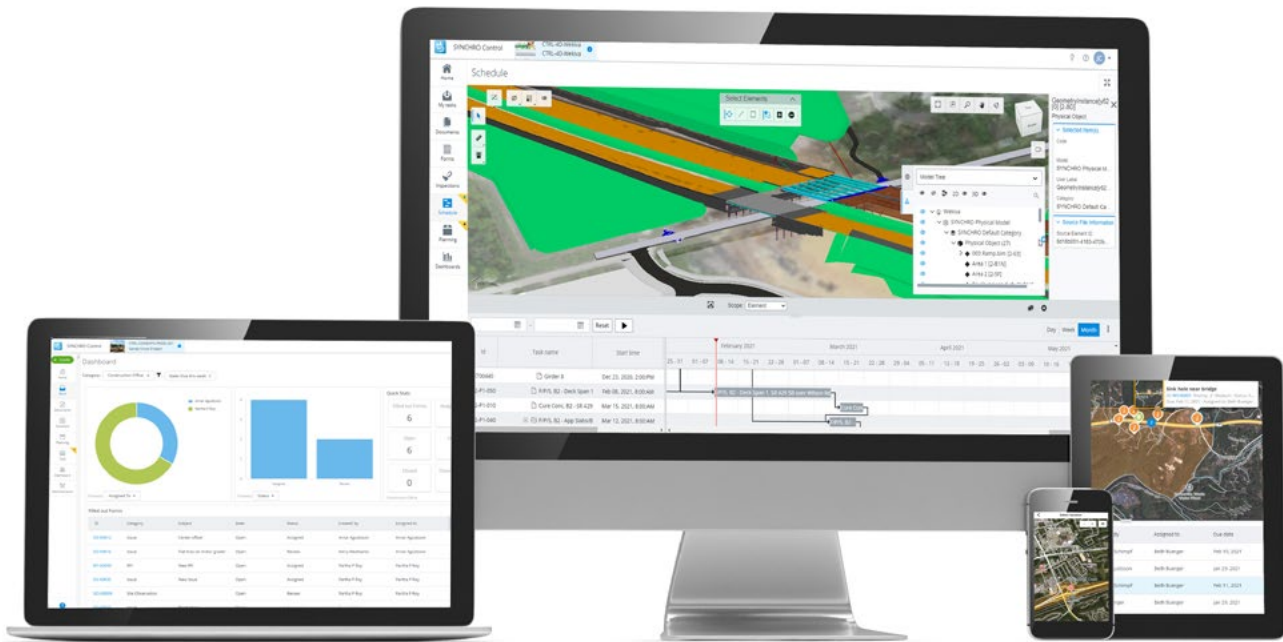
Complete construction management

Bentley®

SYNCHRO: So Much More Than 4D

Construction teams are now recognizing the need to digitalize workflows to improve productivity and deliver predictable project outcomes. It's simple—construction projects that are supported with digital workflows result in quicker data-driven decisions and better project results.

To meet project goals, many construction teams are using SYNCHRO.

If you are familiar with SYNCHRO, you most likely know our digital solution for virtual construction management—SYNCHRO 4D, the industry-leading scheduling and simulation solution for construction projects. It allows teams to digitally enhance construction planning and operations.

But what you may not know is that SYNCHRO has evolved into a complete construction management solution, including:

- **SYNCHRO Field** for mobile access and field management
- **SYNCHRO Control** for cloud-based collaboration and project management
- **SYNCHRO Cost** for managing project contracts
- **SYNCHRO Perform** for overseeing project resources

Field Management & Project Management

THE CHALLENGE

There is a disconnect between the jobsite and the office, with communications between field and office teams often ineffective. These communication challenges lead to a high percentage of construction rework, delays, and errors.

Additionally, various construction data and information shared among project participants may be unsecure, inconsistent, and inaccurate, which negatively impacts field productivity and, ultimately, results in project delays.

THE SYNCHRO SOLUTION

SYNCHRO's field-to-office solution ensures a transparent and secure construction data management environment.This environment provides a single source of project truth so that teams can capture, receive, store, and share construction data in real-time with all project participants in a collaborative, consistent, and accurate manner.

BENEFITS

1. Improve team collaboration and visibility
2. Provide consistent and accurate data and information
3. Ensure secure, federated access to deliver the right information to the right people
4. Increase safety and quality by tackling issues right when they occur
5. Drive field productivity with easy-to-use mobile forms

Discover SYNCHRO Field & SYNCHRO Control

FIELD MANAGEMENT

Built for: Superintendents, Foremen, Inspectors, Field Engineers, Project Managers

SYNCHRO Field is a mobile solution built to solve field execution challenges. SYNCHRO Field allows teams to access and capture data in context—through maps, geo-PDFs, and 2D CAD and 3D/4D models.

Teams can easily capture project updates, handle inspections and RFIs, create custom forms, flag issues, and view model progress. Managers, leaders, and stakeholders no longer lack the real-time project visibility that they need to drive quick decisions around productivity, quality, and safety.

PROJECT MANAGEMENT

Built for: Project Managers, Project Directors, Safety Managers, Operations Managers

SYNCHRO Control is a web solution for document, data, model, and task management.

Teams stay connected around one central hub of project information. SYNCHRO Control makes it easy with its intuitive project tracking and analysis, ensuring real-time control and access of all project progress, as well as full team visibility and collaboration at every project phase.

KEY FEATURES

1. Know where you are on large construction projects (with geo-location services)
2. Simplify your day-to-day tasks, RFIs, inspections, and daily logs, quickly resolving issues
3. Track project models in the field, even when offline
4. Capture real-time data at any moment
5. Access all project documents and media

KEY FEATURES

1. Access, manage, and analyze project data in one place
2. Georeference PDF plan sets in 2D/3D maps and quickly find photos, videos, and files by geolocation, date/time, context, and content
3. Set guest access permissions to help decide who on the project can view what information
4. Integrate with 4D models for schedule and sequencing views
5. Configure forms to your team's needs and export them to your own PDF for archiving

Performance Management

THE CHALLENGE

A key issue in the construction industry is the lack of visibility and transparency into project progress and performance.

Typically, a project's performance management program or system is either not available or done manually and takes a significant amount of time to produce. Lower performing projects tend to have a lot of wasted resources, which reduces project efficiency and profitability.

THE SYNCHRO SOLUTION

SYNCHRO's performance management solution, SYNCHRO Perform, is a digital construction solution to drive project performance with real-time field progress, cost data, project reports, and insights. Operations teams can more effectively manage time tracking, monitor daily costs, and optimize resources—making better and quicker decisions that minimize project errors and maximize productivity.

BENEFITS

1. Improve accuracy of project performance tracking and management
2. Accurately track resources usages (timesheets, other resources sheets)
3. Accurately track actual progress
4. Improve field productivity
5. Improve overall consistency of the data and information

Discover SYNCHRO Perform

PERFORMANCE MANAGEMENT

Built for: Superintendents, Foremen, Project Managers, Safety Managers, Quality Managers

SYNCHRO Perform is a web and mobile solution that provides operations teams with deep, real-time insights into project performance.

With rich project insights, teams make better and quicker decisions to minimize project errors and maximize team productivity.

KEY FEATURES

1. Optimize resource management
2. Monitor and perform action on daily cost reporting and analytics
3. Understand the impacts of events on schedule and budget
4. Capture project progress in field in real time on your mobile device for true project health
5. Create site records—such as daily diaries, unplanned events, and progress—or a true record of events
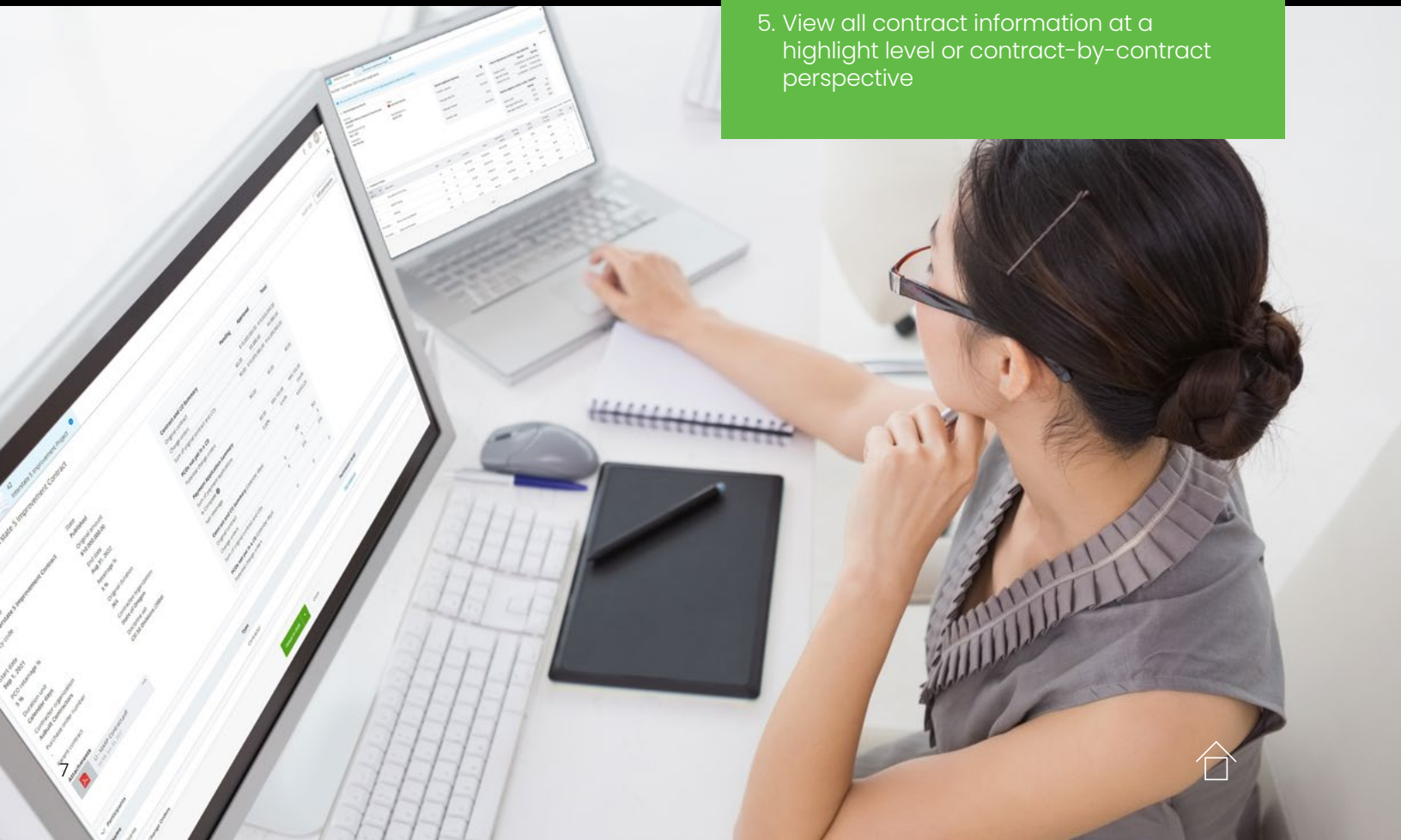
Cost Management

THE CHALLENGE

Cost estimation is one of the most time-consuming and error-prone project activities. Keeping cost estimates accurate and continuously updated as the project progresses is very difficult, as project costs are always evolving and will need periodic readjustments throughout the project lifecycle. Having little or no control of costs poses major risk for the team to deliver the project within the agreed budget.

THE SYNCHRO SOLUTION

SYNCHRO's 5D planning solution, SYNCHRO Cost, is a revolutionary approach to improve cost and planning predictability and the management of resources. Users can better track project costs and contracts, as well as improve accuracy and speed in generating cost estimates, which dramatically reduces errors and data inconsistencies.

BENEFITS

1. Improve overall project planning and accuracy
2. Accurately track progress and cost estimates
3. Improve alignment and communication of project plan to all project participants
4. Automate quantity takeoff (QTO) and management of change
5. View all contract information at a highlight level or contract-by-contract perspective

Discover SYNCHRO Cost

COST MANAGEMENT

Built for: Bid Managers, Business Development Managers, Estimators, Cost Managers, Project Managers

SYNCHRO Cost is a web application built to aggregate all project contracts and payment-related items in one place. SYNCHRO Cost feeds into the SYNCHRO Control dashboard and allows cost managers to better control and collaborate on budgets, monitor payment updates, and handle change orders.

KEY FEATURES

1. Keep track of financial records as a stand-alone user experience or as a collaborative tool

2. View all contract information at a highlight level or contract-by-contract perspective

3. Break down contracts and payment progression into line items and easily filter and sort grid data

4. Set up workflows to determine user permissions and track all financial modifications and approvals

5. Track pending, rejected, and approved payment applications

Virtual Construction Management

THE CHALLENGE

Traditional project planning and control using 2D Gantt charts does not necessarily deliver all that is required for complex, dynamic construction projects. Keeping the project plan up to date with accurate progress and costs under control are tasks proven very challenging and time-consuming due to constant changes.

Construction teams set themselves up for success by leveraging 4D modeling—one of the most effective ways to implement digital best practices, run tests, and simulate sequences in the model before going on site.

THE SYNCHRO SOLUTION

Visual 4D construction planning is a veritable game-changer in the industry. SYNCHRO 4D enables the entire project team to actively participate in the planning process, coordination, and communication of the project plan to maximize the use of time, labor, and materials to ultimately improve the delivery timeline of the project.

BENEFITS

1. Improve overall project planning and scheduling
2. Improve alignment and communication of plans to all project participants
3. Minimize workflow clashes and errors
4. Drive better forecasting and budgeting
5. Optimize resources

Discover SYNCHRO 4D

VIRTUAL CONSTRUCTION MANAGEMENT

Built for: Planner, Scheduler, Estimator, Virtual Design and Construction Engineer, BIM Manager

SYNCHRO 4D is the industry-leading modeling solution that enables teams to turn design models into construction models with cutting-edge model-based QTO, scheduling, and construction simulations.

SYNCHRO 4D enables teams to plan, optimize, and track projects in a single visual, as well as identify issues and "what-if" scenarios early in a digital environment.

KEY FEATURES

1. Take control of time by adding scheduling to your models

2. Leverage model-based QTO and create visual representations of your estimates

3. Optimize construction tasks by reviewing with stakeholders in an immersive environment

4. Plan and collaborate virtually to anticipate "what-if" scenarios and avoid mistakes in the field

5. Tackle the spatial challenges of linear projects and share real-time progress updates on the

Simplify the Journey to a Digital Twin

If you're interested in taking your project data one step further, SYNCHRO data can feed into your digital twin.

A digital twin is a digital representation of a physical asset, process, or system that enables teams to understand, model, and analyze its performance. A digital twin creates a single view of truth, providing all the data needed to improve performance, predict, and prevent unscheduled downtime, lower operating costs, and address any potential safety concerns that may arise throughout the project lifecycle.

A 4D construction digital twin takes that 4D model and includes all the information that allows you to understand the model and its performance. This live, evolving set of data enables teams to exploit the strongest data-driven workflows and optimize performance at every project phase.

We Believe Our Users Say It Best...

SYNCHRO Perform

"SYNCHRO Perform opens up different communication, reporting, and decision-making avenues for people like construction managers, project managers, and engineers. It's a lot easier for them to see how well they are performing and whether they need to up their game. That wouldn't have been available in the past without days or weeks of analysis—and by then, the information would be outdated. With SYNCHRO Perform, as long as your data is current, you have a snapshot in seconds of where you sit as a project."

– Brendan McGuckin, Commercial Manager, MPC Kinetic

SYNCHRO Field

"SYNCHRO Field provides our crews with an immediate link to current plans and specifications to ensure that they are building based off the proper, approved design. By having the ability to immediately address issues and RFIs as they arise, our project team can quickly make intelligent decisions for the project. Crew members that are less technological are embracing SYNCHRO Field, moving away from the older methods of managing the project site and their crews. Our field crews have an opportunity to operate more efficiently and can spend more time building the project rather than spending that time remembering and entering issues, RFIs, notes, logs, and timecards, as well as uploading photos. Using SYNCHRO Field expedites the entry of the information and helps ensure accuracy."

– Matt Blake, Digital Delivery Director, Lane Construction

SYNCHRO Cost

"Construction teams need to ensure that they are in control of both the schedule and costs of their projects. SYNCHRO Cost helps construction teams control costs and stay on budget with detailed financial tracking and change order management. This minimizes financial risks and maximizes project profits."

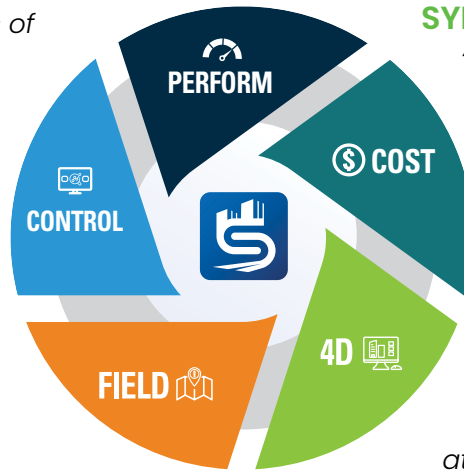*– Bethanie Buerger, Director, Product Management, Bentley Systems*

SYNCHRO Control

"SYNCHRO Control created a platform for all stakeholders to participate without having to download additional software and reduced the learning curve and roadblocks to interface with or view the model. It also provided team members with the opportunity to contribute and track progress at any time. As SYNCHRO Control offers a web-based construction management platform for the team to communicate and collaborate, it removed potential barriers to non-BIM enabled team members."

– David Stone, VDC Leader, DPR Construction

SYNCHRO 4D

"SYNCHRO 4D enabled us to perfectly plan more than 7,000 activities, allowing us to provide detailed planning information to all parties involved in the job and empowering the team to optimize work coordination and scheduling, minimize clash, and increase performance."

– Dr. Fabrizio Tacchino, BIM Manager, Impresa Percassi S.p.A.

Work faster, better, and safer with SYNCHRO

To deliver successful projects, you need to empower your teams, both in the office and the field, with the right digital applications to simplify tasks and meet deadlines and budgets—all while keeping everyone connected and on the same page.

SYNCHRO gets you there, so your teams can work faster, better, and safer.

Curious to learn more? Speak to one of our SYNCHRO experts to better discover how we can help you meet your project needs.

LEARN MORE >

Bentley®