JOIN THE DIGITAL REVOLUTION IN CONSTRUCTION

Harness the power of digitizing the project delivery process from concept to decommissioning

DIGITIZING | AUTOMATING | OPTIMIZING
TRANSFORMING THE CONSTRUCTION INDUSTRY

Due to its nature and characteristics, the construction industry is one of the most complex manufacturing industries to automate. While we all recognize the need to do so, given the fast-growing requirements for improved productivity, efficiency, and waste reduction, the actual implementation of automation remains a challenging task. New technologies and tools for the construction industry, which carry the promise of raising productivity and efficiency, emerge at a rapid pace. Effectively implementing such new technologies and truly automating traditional processes, however, can be a challenging task. One that is not generally solved by just replacing old tools with new ones. Digital Construction Works was created to support the transformation of the construction industry from its legacy document-centric paradigm by seamlessly connecting the various phases in the process and providing a proven toolset of state of the art technologies to automate, optimize and digitize the entire construction process.

DIGITAL CONSTRUCTION WORKS PROVIDES

Industry leading consultancy and implementation services for construction automation and integration through digital twinning.

- Increase productivity of construction processes, optimizing the use of assets and people
- Eliminate data loss at various ‘hand over’ points in traditional processes
- An optimized construction project and it’s digital twin
ENABLING DIGITAL TRANSFORMATION

As your digital integrator, we provide the best people and help you to implement the best processes and technology to automate and optimize your construction operations, through digitization, for improved and predictable project results and for on-time, on-budget project delivery.

WE SEE A DIGITAL FUTURE. LET’S GO THERE.

Digital Construction Works offers a team of industry-leading engineering, construction, civil, geospatial, data architecture, data science, digital process, and project management experts.

We provide the people, processes, and technology, independent of initial data sources, needed to make your move to digital successful. We are on a mission to help our clients realize the potential of a complete digital solution that closes the complexity gap.

With our relevant experience and proven process, we provide end-to-end solutions and a portfolio of digital tools that optimize your construction process through improved predictability, reduced complexity, and operational efficiency.

REALIZE DIGITAL’S POTENTIAL
Enable connected processes from design to operation.

CREATE DIGITAL TWINS
View a representation of an asset at any point in time.

CLOSE THE GAPS
Build bridges between traditional silos.

REDUCE RISK AND LIABILITY
Identify and address potential safety issues at every step.

MANAGE PROJECTS BETTER
Track and manage every project KPI in real-time.

ELIMINATE INFORMATION BOTTLENECKS
Share field and office data from a single, reliable source.

IMPROVE PROJECT PERFORMANCE
Reduce waste, minimize errors, increase profitability.

EXCEED EXPECTATIONS
Stay ahead of challenging stakeholder demands. Win the next project.
CREATING CONSTRUCTION DIGITAL TWINS

Digital Construction Works helps you create a full digital representation of your entire construction project through digitization of processes and a continuously synchronized information flow from all relevant sources (including sensors and continuous surveying). We help you optimize and use the variety of tools that are available today, whether already in use on your projects or new, in the most efficient manner. Not only will this improve overall operational project performance, but it also creates a true digital representation as part of the final deliverable for solid lifecycle management.

OUR SERVICES

In addition to our consultancy and project management services, depending on your project and requirements, we offer a variety of additional services to assist in optimizing and digitizing your workflows in order to help you create your digital twin. Our services include but are not limited to:

ADVANCED WORK PACKAGING
A single source for total project integration

CONSTRUCTION MODELING (4D/5D)
Control cost and reduce waste through optimized planning

VISUALIZATION AND ANALYSIS
Project dashboards to enhance decision-making with user-friendly tools

DIGITAL TWINNING
View a representation of an asset at any point in time

CONTINUOUS SURVEY
Reality capture and reality modeling to update and maintain digital context
A Construction Digital Twin requires an efficient flow of data from the field to the office and information back from office to field. The Labs make up our R&D engine where we define and discover new workflows and technology integrations affecting interoperability, reporting, analytics, and digital twin delivery.

We provide the heartbeat for your Construction Digital Twin.

Open innovation with clients and close connections to other technology leaders allow us to push the boundaries of digital integration and construction automation.

Through the Labs, you can rest assured that the solutions we recommend on your project will be proven, verified, validated, and documented by a team of the foremost experts in digital construction.

**TURNING BIG IDEAS INTO PRACTICAL SOLUTIONS INSIGHTS**

**DIGITAL TWIN LAB**

The Digital Twin Lab develops and proves solutions and workflows which drive an efficient flow of data from field to the office and the office to the field. Our open innovation with clients and our close connections to other technology leaders allow us to push the boundaries of digital integration and construction automation.

**SOLUTIONS INTEGRATIONS LAB**

Our Solutions Integrations Lab delivers new data points and efficiencies not available today through key product integrations. Our development team will deliver repeatable integrations between the various toolsets used on the job today. The Lab aims to produce increased project transparency and improved decision making via deep and actionable analysis of data that reside in every project.

**TURNING DATA INTO ACTIONABLE INSIGHTS**

**PHASE 1: DESCRIPTIVE**

Data aggregation and data mining analytics provide insight into the past and answer: “What has happened?”

**PHASE 2: PREDICTIVE**

Statistical models and forecasting techniques help us understand the future and answer: “What could happen?”

**PHASE 3: PRESCRIPTIVE**

Optimization and simulation algorithms allow us to advise on possible outcomes and answer: “What should we do?”
DIGITAL CONSTRUCTION WORKS COMMUNITY

Digital Construction Works is committed to providing the optimization of your construction projects, through digitization and Digital Twinning. We offer workflow solutions that serve as a ‘open-platform’ and integrate a wide variety of products and deliverables from various suppliers. We welcome collaboration and partnership through our community. If you are a construction professional, a service provider, educator, or the developer of the latest disruptive technology, there is a place for you in our community.

BENEFITS OF PARTNERING

SOCIETAL VALUE
- Shape the future of sustainable infrastructure
- Improve the way we deliver built environments
- Personal accomplishment and contribution to a community

COMMERCIAL VALUE
- Engage in field and office work to deliver Digital Construction Works solutions to our clients
- Partner listing on the Digital Construction Works website
- Brand associated with innovative educational partners
- Associated with peer leaders

EDUCATIONAL VALUE
- Association with TheLabs@DCW
- Access to regular community exchange sessions
- Access to the latest content around digital construction processes
- Inclusion of technology pieces to be used for data analysis in the Lab
DIGITAL CONSTRUCTION WORKS PARTNERSHIPS

Digital Construction Works is a leading services organization providing digital automation, integration, twinning services and fit-for-purpose solutions to automate and optimize the construction process from design through to operations. Founded in 2019, Digital Construction Works is a Bentley Systems and Topcon company.
digitalconstructionworks.com

Bentley Systems is the leading global provider of software solutions to engineers, architects, geospatial professionals, constructors, and owner-operators for the design, construction, and operations of infrastructure. Bentley employs more than 3,500 colleagues, generates annual revenues of $700 million in 170 countries, and has invested more than $1 billion in research, development, and acquisitions since 2014. From inception in 1984, the company has remained majority-owned by its five founding Bentley brothers. Bentley shares transact by invitation on the NASDAQ Private Market.
bentley.com

Topcon Positioning Group always one step ahead in technology and customer benefits, is an industry leading designer, manufacturer and distributor of precision measurement and workflow solutions for the global construction, geospatial and agriculture markets. The headquarter of Topcon Positioning Group is Livermore, California, U.S.. Its European head office is in Capelle a/d IJssel, the Netherlands. Topcon Corporation (topcon.com), founded in 1932, is traded on the Tokyo Stock Exchange (7732).
topconpositioning.com
EXPLORE THE TRANSFORMATIVE POWER OF DIGITAL

Let’s discuss how we can help you realize the power of digital for your business.

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