DIGITAL CONSTRUCTION WORKS

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DIGITAL CONSTRUCTION WORKS

SERVICES AND SOLUTIONS

ACCELERATE DIGITAL ADOPTION AND IMPROVE OPERATIONAL WORKFLOWS AND EFFICIENCIES IN CONSTRUCTION

DIGITIZING | AUTOMATING | OPTIMIZING

OUR TEAM

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.

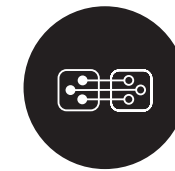# WE SEE A DIGITAL FUTURE.
LET'S GO THERE.

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

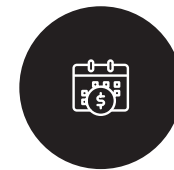View a representation of an asset at any point in time.

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

DIGITAL READINESS
Accelerate digital readiness with an assessment workshop

PROCESSING SERVICES
High definition reality model processing and extraction
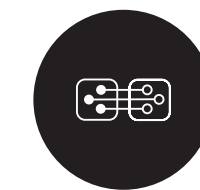
OUR SOLUTIONS

A construction digital twin requires an efficient flow of data from the field to the office and information back from office to field. The DCW 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.

THE LABS: TURNING BIG IDEAS INTO PRACTICAL SOLUTIONS

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.
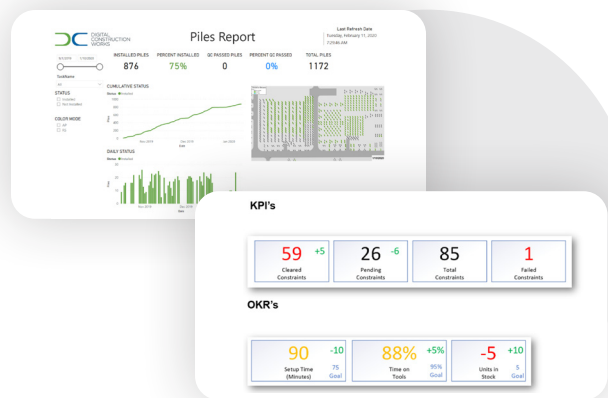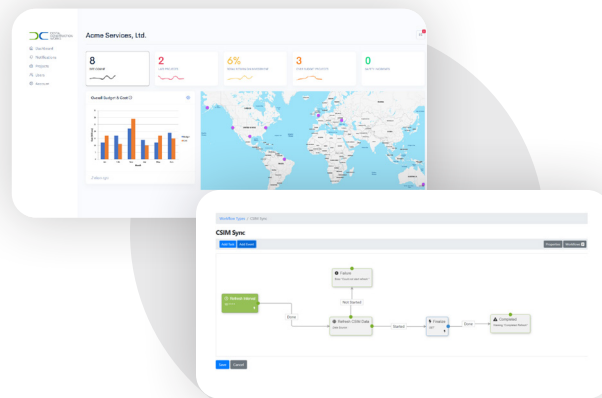
TURNING DATA INTO ACTIONABLE INSIGHTS

DCW INTEGRATIONS PLATFORM

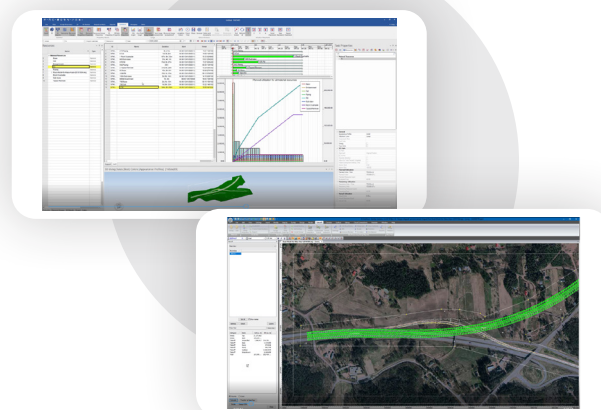REALITY MODEL PROCESSING AND VISUALIZATION.

Securely integrates various product sets and digital services as fit-for-purpose workflow-based processes and empowers the digital twin and DCW analytics, which improves overall project awareness, management, and reporting.
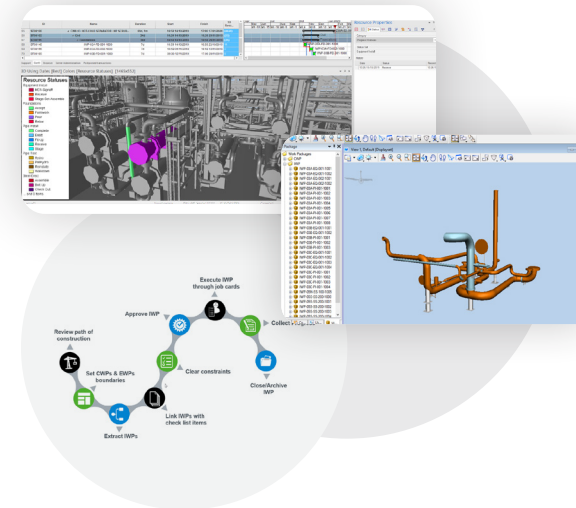
DCW INSIGHTS

PROJECT PERFORMANCE AND ANALYSIS.

Provides project performance analytics via secure dashboards and uses advanced analytics to monitor construction activity, helping to mitigate cost and time overruns while keeping safety at the forefront.

DCW 4D MASS HAUL EARTHWORKS

Mass haul scheduling to optimize earth moving operations through integrated planning workflows for civil, 4D earthwork quantities, project planning and simulation.
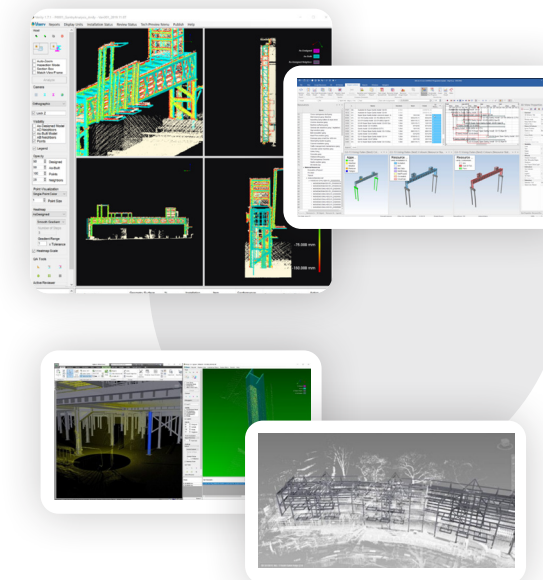
DCW 4D CONSTRUCTION VERIFICATION- TRANSPORTATION, BUILDING AND SITE

Improve project status reporting and remove potential as-built backlog. Continuously compare reality versus design, allowing for a faster and more automated way of collecting as-built data and comparing it to an as-planned status. This process also removes the potential backlog of survey-to-the-model updates and allows better asset management. Through this method, data is collected using mobile mapping and terrestrial workflows and processed and prepared for analysis. A regular digital twinning cycle requires proper 4D planning. The collected data (reality) is compared to the 3D Model (design). Reports, planning updates, and other outputs are then generated based on specification requirements.

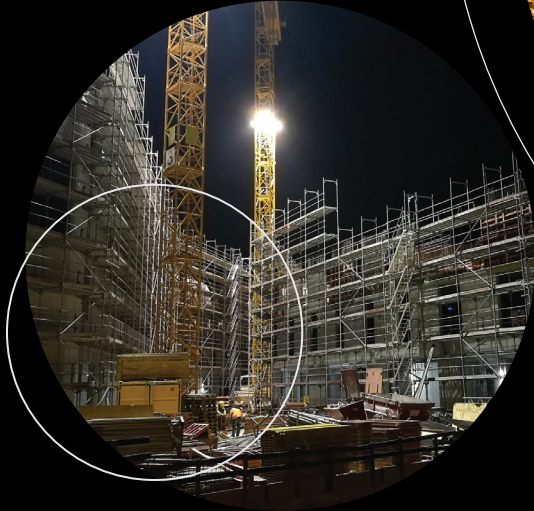### DCW CONSTRUCTION SOLUTION FOR AWP

Ensure successful project outcomes and the creation of a digital twin. Drastically improve the cost, schedule, and predictability of projects using a connected data environment to facilitate digital workflows for 3D CAD model change management, the path of construction, 4D simulation, work packages creation, 4D sequencing, constraint analysis, materials management, construction verification, and completions, commissioning then startup.

DCW 4D TEMPORARY WORKS

Continuous surveying and software to analyze current site status semi-automatically with parametric design rules to calculate minimum number of temporary equipment needed. Accelerate the construction feedback loop with as-built conditions compared geometrically to as-planned and reduce construction costs with 4D planning.

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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