



For the Construction Industry

Digital Automation for the estimated \$10 Trillion Global Construction Industry

The Year in Infrastructure Conference, Digital Construction Works (DCW), a new digital automation, integration, and digital twinning services and fit-for-purpose solutions company formed by Bentley Systems and Topcon Positioning Group, will help revolutionize the construction industry by simplifying digital transformation. DCW solutions span every phase of the project – from planning to construction and operations through to asset management – creating a digital thread that connects technologies and workflows.

Contributing 13 percent of global GDP and an estimated \$12.9 trillion market by 2022, construction is the largest industry in the world and is positioned to benefit from significant value through productivity improvements. The World Economic Forum estimates within ten years, full-scale digitization could lead to savings between USD 700 billion to 1.2 trillion (13% to 21%) in design, engineering, and construction efforts. Construction organizations need capabilities to analyze historical data, forecast what might happen in the future to avoid operational issues before they occur, reduce waste and downtime, improve safety, and reduce risk and liability. Logistics and on-site materials can be managed using digital tools to reduce waste and optimize for just-in-time delivery, increasing productivity on the construction site.



DCW end-to-end services automate and optimize construction operations through the digital transformation of the asset lowering full-lifecycle asset costs. Through digital twins, you can visualize the asset, check status, perform analysis, and generate insights to predict and

optimize asset performance. Fast and continuous site surveying using modern technology shortens the digital twinning cycles between the physical and digital twin, achieved in combination with automated analytics. This process is applicable for linear infrastructure, but also vertical construction or the extensive off-site modular construction.

‘We see the benefits of working with organizations such as DCW, whose position in the market as the only end-to-end construction solutions service provider brings us confidence in how our core business targets will be kept a priority throughout the entire project,’ said Harry Parnell, head of digital project delivery for Balfour Beatty. ‘Their ability to be agnostic to technology is also important. We know that a combination of technology and process improvement will provide us with the best digital solution and make sure that technology follows the operational process change efforts, but never leads it. The use of technology in silos throughout our organization will never bring real operational, or industry change, but the use of technology with digital twin workflows and key operations processes in a focused and strategic effort will enable Balfour Beatty to reduce the gap between the office and the site continually.’

‘Balfour Beatty’s vision of 25% less on-site work on projects by 2025 can only be achieved through the successful implementation of digital twin workflows and key operational processes and the use of technology. Implementing full digital construction



solutions into our business, such as those provided by DCW, will enable us to achieve our project outcomes and business goals, including ‘Zero Waste’ and ensure that Balfour Beatty projects can continually improve by learning from our successes,’ said Harry Parnell, head of digital project delivery for Balfour Beatty.

Owners don’t need to do it on their own. DCW can do it for them. DCW will help them to automate and connect disparate tools, including fit-for-purpose software and cloud services from Bentley and Topcon or, if needed, by other third parties. DCW can provide next best practices and enable project teams to gain visibility and insights through data and analytics to improve construction planning, execution, reduce project costs, increase safety and reduce liability, and improve capital project delivery.

Through its Partnering and Community, DCW has a global network of service providers who engage in projects with our customers to deliver digital transformation outcomes. The network includes technology partners such as Bentley Systems and Topcon Positioning Group and other third-party technology providers. Educational resource providers, including schools, unions, and trades, will be partnered-with to help fill the construction skills gap.

The Labs at DCW drive increased transparency and efficiency in construction operations. The Labs

turn big ideas into solutions and serves as the construction industries R&D engine, where we prove repeatable workflows and technology integrations affecting interoperability, reporting, analytics, and digital twin delivery. DCW Labs use analytical solutions to extract meaning from enormous volumes of data to help organizations improve their data-driven decision making. Such solutions help support the integration of project data across disciplines and teams, at every step of the construction process, for better collaboration to identify conflicts and risks. It helps to transform the industry from its legacy document-centric paradigm to a complete digital space-time operating system. Project teams receive verification in near real-time for on-time, predictable, and on-budget project delivery.

Ted Lamboo, CEO of DCW, said: ‘The construction industry sees that digitizing their workflows will increase efficiency and avoid risk and overruns. Leveraging Digital Twins will accelerate this process, and DCW can support the marketplace to make this transition. Our broad spread of digital solutions and services will support our users in this process.’

‘We believe that open collaboration and a commitment to improving the industry are the primary requirements for step-function advancement in digital construction, said Jason Hallett, COO of DCW. No single tool company can, or should, own the entire construction process as that journey only leads to a lack of innovation. DCW is starting with the backing of two large product companies, and we will welcome technology partnerships and service providers that can contribute to delivering a complete portfolio of digital solutions that are capable of moving the industry toward a more efficient and automated future.’

DCW brings together both a combination of Bentley and Topcon

colleagues, including Domain Experts from the construction industry.

DCW is led by CEO, Ted Lamboo, who most recently served as a senior vice president of strategic partnerships and held previous positions including senior vice president of reality modeling and business development, senior vice president of international operations, president of Bentley Asia/Pacific, and vice president of sales for Bentley Europe, Middle East, and Africa. Before joining Bentley in 1994, Ted served for 12 years at Intergraph Europe.



Jason Hallett, formerly a vice president at Topcon responsible for global software business development and digital construction initiatives, serves as chief operations officer of DCW. Jason’s responsibilities span global operations, including the Labs (Digital Twin Lab and Solutions Integration Lab), project delivery, partnering, and third-party resource management. His career spans 31 years in the surveying and construction industries.

Tom Degenis, former chief executive for SYNCHRO, a 4D construction technology provider that Bentley Systems acquired in 2018, will serve as Principle Research Officer for the new company. With 40 years of experience in construction, both on the site and in the office, and construction consulting working for one of the big-4 professional services and accounting firms,

Degenis is committed to improving the construction industry through software platform development and systems implementation.

Susan Brandt serves as vice president of business development, where she has global responsibility for business strategy, growth, and user success within Digital Construction Works. Over a solid 30-year career, Susan has built a reputation as a trusted advisor to some of the largest and most respected owner-operators, engineers, and constructors in the world. She began her career in the OG&C industry as an early adopter of 2D and 3D CAD (BIM). Before joining Digital Construction Works, Susan served as Bentley’s vice president of global accounts, achieving consistent top growth results for the company. In her 23-year tenure at Bentley, she has held several leadership roles in sales, product management, and business development and was a key contributor in scaling ProjectWise, one of Bentley’s flagship products, from a first-mover advantage in 1998 to a sustainable #1 market share in top ENR firms. No matter the position, Susan has and will remain the voice of the user, always taking an ‘outside-in’ approach partnering with users on their outcomes. We are delighted that Susan will be on the Senior Leadership Team, as the voice and advocate for our users during this time of required change in the industry.

Beth Emmert serves as senior director of marketing joining the DCW leadership team most recently from Bentley Systems, where she held positions including that of strategic partnerships marketing director and head of Americas marketing. Beth is an industry award-winning marketing professional whose marketing career spans over 30 years, having started in marketing and communications for a global environmental engineering, design, construction, and consulting firm. Beth’s background also includes

15 years in biotech and healthcare software technology and services. She’s held positions including product management, strategic marketing, communications, and global marketing responsibility for publicly traded and private start-ups. Her experience also includes M&A’s and corporate restructuring.

DCW operates independently with a board of directors comprising members from both organizations. Bentley and Topcon will continue to co-develop AEC products for use across many industries. DCW serves as the Strategic Partner for both Topcon and Bentley for servicing the digital transformation in the construction industry.



Founded in 2019, Digital Construction Works (DCW) provides digital automation, integration, and ‘twinning’ services, around fit-for-purpose software and cloud services from Topcon Positioning Group, Bentley Systems, and other software vendors, to realize the breakthrough potential of construction for industrializing construction. DCW is transforming the construction industry from its legacy document-centric paradigm and simplifying and enabling digital automated workflows and processes, technology integration, and digital twinning services for infrastructure. DCW is a Bentley Systems and Topcon Positioning Group joint venture.

Helicopters descending on Dubai

The Helicopter Company, Bell and More to be at Dubai Airshow

The Dubai Airshow, the largest aerospace event in the Middle East, will bring together key players from all aspects of the aerospace industry, including the world’s leading helicopter companies. When the show opens on 17 November 2019, trade attendees can expect to see offerings from this year’s platinum event sponsor, the Helicopter Company, alongside Bell, Sikorsky (a Lockheed Martin Company), Leonardo, the Russian Helicopter Company and many others.

Launched earlier this year backed by Saudi Arabia’s state-run Public Investment Fund (PIF), the Helicopter Company is the Kingdom’s first commercial helicopter operator and is aligned with the Saudi Vision 2030 to provide the best support services to the transportation industry in general, and the aviation industry in particular.

The Helicopter Company plans to use the Dubai Airshow as a platform to develop relationships with contacts in the industry, connect with other players in the local and global aviation and aerospace industry and to introduce its latest Rotorcrafts for VIP transportation within the Kingdom.

‘The Middle East’s aerospace industry is a growing market that offers a lot of opportunities,’ says Yahya AlGhorabi, CEO of The Helicopter Company. ‘The big-

gest challenges would be to keep up with the accelerating growth in this industry. Fortunately, this makes room for a multitude of investment opportunities and partnerships for local and foreign partners. The Dubai Airshow is a perfect opportunity for talks about such partnerships.’

In the Middle East region, Bell focuses on Law Enforcement with the Bell 429, Bell 412EPs and military trainer opportunities for the Bell 505 and Bell 407, plus the light attack helicopter segment with the Bell 407. On the other side of the spectrum, the Bell 525 super-medium helicopter is disrupting the market with its new technologies, redefining luxury vertical lift, is a 16 to 19 seat helicopter coming to market. The first commercial helicopter with fly-by-wire controls, Bell describes it as ‘probably the most



advanced commercial helicopter that has ever been developed for oil and gas and search and rescue’.

‘The Dubai Airshow is the opportunity to meet with our regional customers in one place, to continue the engagements we have year round with our operators,’ says Patrick Moulay, Senior Vice President, Bell Commercial Business – International. He continues, ‘It is also a great platform for us to provide updates on our activities, our local success and what you can expect from Bell in the Middle East.’

‘The Dubai Airshow has always been the platform for the entire aerospace industry,’ says Michele van Akelien, Managing Director of show organisers Tarsus F&E LLC Middle East. ‘The helicopter sector is an important part of that, and we are thrilled to have the Helicopter Company on board as platinum sponsor for the Dubai Airshow 2019.’

The static display area at the Dubai Airshow will include up to 165 aircraft including an AW139 from the Helicopter Company, an Mi-2MSB-1 from Motor

Sich and a CH-47F Chinook Helicopter from Boeing, in addition to other helicopter models.

Tarsus F&E LLC Middle East is one of the most influential names in the aerospace industry’s events sector, and which launched the very first Dubai Airshow in 1989, in conjunction with Dubai Civil Aviation Authority, Dubai Airports and the UAE Armed Forces.

Covering all aerospace-related events in the Tarsus portfolio, Tarsus F&E LLC Middle East has a long-standing relationship with the global aerospace industry, an in-depth knowledge of the market and a hard-earned reputation for delivering event excellence. Tarsus F&E LLC Middle East maintains offices in Dubai and London.

Dubai Airshow is firmly established as a key event on the international aerospace calendar. The next edition takes place at its purpose built location – DWC, Dubai Airshow Site, 17-21 November 2019. The Dubai Airshow is the foremost platform to promote any trends to discuss issues that will help develop the Middle East aviation industry.

International success

Wibu-Systems wins the GLOBAL Foreign Trade Award 2019

The prestigious GLOBAL Foreign Trade Award 2019 has gone to Wibu-Systems alongside the other winners Blanco Group and Wickert Maschinenbau. Every two years, the TechnologyRegion Karlsruhe and the foreign trade committee of the Karlsruhe Chamber of Commerce picks internationally successful companies from the region for the GLOBAL award. This year’s award, presented at a gala event on 16 October, draws attention to particularly effective international business models, with the award jury considering such factors as the candidates’ roots in the Karlsruhe region, structures, innovation and performance track record, intercultural affinity, and ability to adapt to the markets in other countries.



subsidiaries in the United States, China, and Japan and sales offices in Europe. Direct exports account for approx. 55% of Wibu-Systems’ sales, although this share rises to almost 80% when sales through distributors and subsidiaries and the similarly strong exports of German clients are included.

Wibu-Systems’ CEO and founder Oliver Winzenried was proud to receive the award: ‘Accepting the GLOBAL 2019 on behalf of Wibu-Systems is a personal honor for me. Free trade benefits us all: It creates better and cheaper products, more choice, more jobs, more security, and greater peace through co-operation. We care about open international standards, as do our clients who integrate our solutions in the products they sell around the world. The sheer diversity of challenges and talents we encounter worldwide makes us more competitive, and diversifying our markets makes us less exposed to the vagaries of single markets.’

МЕТАЛЛОПРИБОРКА И СВАРКА XIV ВЫСТАВКА

20-22 НОЯБРЯ 2019

ОБОРУДОВАНИЕ МИРОВЫХ БРЕНДОВ В ДЕЙСТВИИ!

Впервые одновременно с СИБИРСКИМ ЭНЕРГЕТИЧЕСКИМ ФОРУМОМ и выставкой «НЕФТЬ. ГАЗ. ХИМИЯ.»

МЕЖРЕГИОНАЛЬНЫЙ КОНКУРС ПРОФЕССИОНАЛЬНОГО МАСТЕРСТВА «СВАРЩИК ГОДА - 2019»

- ◆ Машиностроение. Станкостроение
- ◆ Металлургия. Металлообработка
- ◆ Инструменты. Метизы
- ◆ Дефектоскопия
- ◆ Литье. Сварка
- ◆ Охрана труда на предприятии
- ◆ Автоматизация производственных, коммерческих и жилых объектов
- ◆ Инновационная обработка поверхностей
- ◆ Логистика. Транспорт. Склад

МВДЦ «Сибирь» ул. Авиаторов, 19
тел: (391) 200-44-00

912@krasfair.ru
www.krasfair.ru

МЕЖДУНАРОДНЫЙ ЭКОНОМИЧЕСКИЙ ФОРУМ INTERNATIONAL ECONOMY FORUM CASPIAN DIALOGUE

КАСПИЙСКИЙ ДИАЛОГ 2019

27 НОЯБРЯ 2019 МОСКВА ИПЭЭ РАН

ИННОВАЦИИ В ЗАЩИТУ КАСПИЯ
INNOVATION LET'S PROTECT THE CASPIAN

27 NOVEMBER 2019 MOSCOW IPEE RAS

ДИРЕКЦИЯ:

ТЕЛ: +7 (999) 667-90-05, +7 (966) 310-02-75

E-MAIL: CASPIANCOUNCIL@MAIL.RU

WWW.CASPIANSOVET.RU