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## CIMdata News

### ***Accelerating the Transition to Green Energy with Product Lifecycle Management***

9 February 2023

In an article published February 9, 2023 Mark Reisig of CIMdata discusses how PLM can be used to accelerate the transition to green energy. He says, “A key factor in accelerating this transition is using digital technologies to control product data for wind, solar, and nuclear. All companies run on product data—it touches all phases of a product’s/plant’s lifecycle. Those that can harness their data outperform their competition. They’re able to innovate, scale, and transform, merging their digitalization efforts sustainably and making them more resilient competitors in the marketplace.”

Read the full article here: <https://www.powermag.com/accelerating-the-transition-to-green-energy-with-product-lifecycle-management/>

### ***Accelerating Your Path to Net-Zero - a CIMdata Blog***

6 February 2023

Greenhouse gas (GHG) emissions continue to rise, causing the earth’s surface to warm 1.1°C beyond preindustrial levels. This is tracked by NASA satellites, which show the earth’s surface getting warmer as heat-trapping GHGs cause the stratosphere to cool. This has not happened for millions of years and is causing catastrophic consequences in the form of many harsher and more frequent climate change disasters. Net-zero means “cutting greenhouse gas emissions to as close to zero as possible, with any remaining emissions re-absorbed from the atmosphere.” <https://www.un.org/en/climatechange/net-zero-coalition>.

According to the UN, based on government pledges, we are on track to reach 2.8°C by the end of the century, far above the target of 1.5°C or even the 2.0°C limit set out in the Paris Agreement in 2015. Based on national action plans, we will increase global GHG by over 10% by 2030, compared to 2010 levels. This means we need to reduce GHG emissions by 45% in the next seven years to limit warming to no more than 1.5°C and reach net-zero by 2050. <https://www.unep.org/resources/emissions-gap-report-2022>.

If you’re asking yourself, “How big will this trend get?” Consider that in 1954, we had a world population of 2.7 billion, with 310 parts per million (ppm) of carbon in the atmosphere, and 64 percent of wilderness remained. As of 2020, the world population was 7.8 billion, with 415 ppm of carbon in the atmosphere and 35 percent of wilderness remained. For over 800,000 years, CO<sub>2</sub> levels fluctuated between 170 ppm and 280 ppm, not 417.2 ppm, which was last year’s average and growing. The last time humans experienced global warming like this, where the ppm of CO<sub>2</sub> went above 300 ppm, was . . . well, never. Humans have never lived in conditions even remotely close to what we are experiencing now, which is not sustainable for future generations’ survivability. (A Life on Our Planet: My Witness Statement and a Vision for the Future, by Sir David Attenborough, Joannie Hughes, 2020)

This is causing what is known as the “green transition,” a move away from fossil fuels to renewable energy and living and using more sustainable products and services that eliminate waste. It is beginning to galvanize people, companies, investors, countries, and policymakers. And there is no company that can avoid having to transition to net-zero as this will be fundamental to the future.

To give you an idea of the momentum, in 2016, only 13 companies had net-zero pledges. Today, over 4,200 companies have Science Based Target Net-Zero commitments. This trend will only intensify the

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longer we use fossil fuels, increase GHG emissions, and experience the consequences. <https://sciencebasedtargets.org/reports/sbti-progress-report-2021>.

Last year, investors poured a record \$649 billion into ESG-related funds as of November 30, 2022, compared to \$285 billion in 2019, which accounts for 10% of worldwide investments in 2021. <https://www.reuters.com/markets/us/how-2021-became-year-esg-investing-2021-12-23/>.

Environmental, social, and governance (ESG) standards are here to stay, and investors and regulators are demanding transparency on carbon emissions, social impacts, and governance. CIMdata has a Sustainability and Green Energy practice to help companies reduce their product carbon footprint (PCF), design sustainability into their products and services, and embed sustainability within their PLM strategy.

It has been said that 80% of the environmental impact is locked into the product in early design. Most GHGs are embodied in the materials companies use to make their products. Therefore, the fastest way to reduce the PCF is to have visibility to the carbon equivalents (CO<sub>2</sub>e) for each part or material during design as well as maintain it throughout the product's lifecycle. And since most CO<sub>2</sub>e comes from your supply chain (known as scope three emissions), you need visibility into your supply chain as you design.

The next thing to consider is—are you designing for sustainability? Is your product used in a cradle-to-cradle circular model where you have accounted for all emissions? Or is it cradle-to-gate or cradle-to-site? Some major products have committed to reaching net-zero emissions and becoming 100% recyclable. To do this, you must reconsider how you design with the end of life in mind. How do these materials get repaired, repurposed, and recycled, and how do they become nutrients that return to the earth? If this sounds far fetched, it is not—it is beginning to happen, becoming a competitive differentiator. Also, if you think this will not be mandated, then as just one example, you may wish to consider brushing up on the EU rules for the design, production, and waste treatment of batteries: <https://www.europarl.europa.eu/news/en/press-room/20221205IPR60614/batteries-deal-on-new-eu-rules-for-design-production-and-waste-treatment>.

Many green innovators are experiencing tremendous growth and shareholder value, so when you think of this as an extra cost, there is a strong argument to be made that long-term sustainability is far more profitable. Going green is not just beneficial to people, the planet, and your brand image, such as with Patagonia. Companies with state-of-the-art PLM strategies that have high visibility of their CO<sub>2</sub>e, cost, quality, and many aspects of their product throughout its lifecycle will be able to accelerate their drive to net-zero. The reason for this is that they have collective visibility to their PCF. Additionally, they are in a much better position to reduce their costs, increase their innovation, and time-to-market while building a more resilient supply chain.

Recently, I presented a CIMdata Educational Webinar titled The Green Energy Transition and Sustainability, which you can find here: <https://register.gotowebinar.com/register/8685773949299271951>

I would like to hear from you. Please take a few minutes to take part in our 2023 Green Energy and Sustainability Survey. Receive a copy of the findings and enter a drawing for a gift card or donation to Engineers without Borders. Take the survey at <https://lnkd.in/eT-SEmFD> #sustainability #greenenergy

Thank you again, and please reach out to me with any questions.

Mark

PS: Check out the new Green Energy [consulting practice page!](#)

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## ***Free Webinar on the Promise and Reality of the Digital Thread***

9 February 2023

CIMdata, Inc., the leading global PLM strategic management consulting and research firm, announces an upcoming free webinar, “The Promise and Reality of the Digital Thread.” The webinar will take place on Thursday, 9 March 2023, at 11:00 a.m. (EST) and will last for one hour.

The concept of linking multiple representations of a product, each tuned to the needs of various creators and consumers along the lifecycle, is very powerful. Until recently, tracing these linkages has been primarily a manual process. But now, with recent advances in commercial PLM solutions, the digital thread, with automated linkages and traceability, has become a practical possibility.

With the newness of this approach, there is not much available in the way of lessons learned or actual value achieved. This lack of real data is a barrier to broader investment. On the solution side, providers are constantly seeking additional insight into the current state and future investment drivers within industry, which is crucial to their solution strategies and roadmaps. CIMdata, on behalf of the Aerospace & Defense PLM Action Group, has recently completed an extensive industry research project on the digital thread. Aras, Eurostep, Jama Software, PTC, and Siemens Digital Industries Software were also research partners.

This webinar will share CIMdata’s perspective on the digital thread: what it is, what drives its value, and how to realize value in practice. Key findings from the industry research will be provided.

Attendees at this webinar will:

- Gain an understanding of the basic concept of a digital thread.
- Learn about the basic guidelines for designing and incrementally implementing a digital thread vision.
- Understand the perspectives of industry leaders regarding the nature of the digital thread and drivers for investment.
- Learn where and how industry leaders have successfully implemented portions of their digital thread vision.
- Learn where and how industry leaders are planning to invest in expanding their digital thread vision.
- Recognize the most significant barriers faced and the mitigation methods employed by industry leaders in pursuit of their digital thread vision.
- Find out how industry leaders view the current state of digital thread-enabling technologies and the degree of alignment with their solution providers.

According to James Roche, CIMdata’s Director, Aerospace & Defense Practice, and the host for this webinar, “The concept of the digital thread is vast and inspiring, and the value potential is real. Leaders in many industries are pursuing digital thread strategies, often without a clear vision, and in many instances within or alongside digitalization, another vast and inspiring concept. Such initiatives are high risk. The industry research recently completed by CIMdata provides a critical fact base to guide thoughtful planning with greater reach and reduced risk.”

James Roche has 35+ years of experience in transformation and the IT enablement of product development and manufacturing processes. Before joining CIMdata, he was a PLM Practice Manager at CSC Consulting and A.T. Kearney. He was also at EDS, serving as the chief architect for General Motors’ global engineering systems and as the head technical negotiator for strategic supplier contracts.

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Anyone with responsibility or interest in product program integration, systems engineering, PLM program planning, or, more generally, in digitalization or digital thread will find the presentation interesting.

During the webinar, attendees will have the opportunity to ask questions about the topics discussed. To find out more, visit: <https://www.cimdata.com/en/education/educational-webinars/webinar-the-promise-and-reality-of-the-digital-thread-results-of-industry-research>. To register for the webinar, please visit: <https://register.gotowebinar.com/register/2001858157211776781>.

## ***SMEs: Using Digital Manufacturing to Survive and Thrive - a CIMdata Commentary***

8 February 2023

### *Key takeaways*

- In today's global competitive markets, it is increasingly difficult for small-to-medium size manufacturers (SMEs), such as part manufacturing companies, to survive as the manufacturing and supply chain challenges become more complex.
- SMEs, even those with 25 or fewer employees, can now adopt modern digital manufacturing technologies and solutions once reserved for large enterprises to get the most out of their limited resources and remain competitive.
- Siemens Xcelerator portfolio enables creation of a digital thread and management of the product data and processes that span the complete production process, allowing manufacturers of all sizes to execute their digital manufacturing initiatives more effectively.
- An SME case study illustrates how a machine shop has utilized digital technologies to grow its business. Using advanced manufacturing processes powered by Siemens' technology, they now operate up to 25% more efficiently while delivering better products and maximizing available resources.

### Introduction

Major trends disrupting the manufacturing industry have driven the need for increased investments in digital technologies to modernize production facilities and processes among companies of all sizes. Challenges in increasing product complexity, resource availability, operational flexibility and speed, and supply chain create additional headwinds for SMEs that must compete in highly competitive global markets.<sup>[1]</sup>

Concepts such as Industry 4.0, smart manufacturing, the Internet of Things (IoT) and Industrial IoT (IIoT), the move to smart, connected products, and digital transformation, among others, were once reserved for large enterprises. Today, an increasing number of SMEs are evaluating how they do business and the digital technologies they need to employ. CIMdata has seen strong growth in recent years by SMEs implementing digital technology and practices and believes that this digital transformation trend will continue.

The demand for increasingly complex products, coupled with ongoing supply chain disruptions and new environmental regulations, makes it harder than ever for SMEs to keep pace in today's competitive markets. However, by using digital manufacturing solutions even small enterprises can enable efficient automation throughout their production processes, both in programming and on the shop floor, to increase productivity and remain competitive.

Unfortunately, many SMEs have not been able to survive in today's rapidly evolving, competitive global marketplace. Statistics show that approximately 20% of SMEs fail within the first year and only 30%

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survive for 10 years or longer. So why are SMEs and their survival important? In many countries, SMEs account for over 95% of firms and 70% of all jobs. A key factor impacting survival of manufacturing SMEs, is their ability to digitally transform their business and operate more effectively.

Worldwide, manufacturers are working to digitalize, a trend that continues to accelerate, and many SMEs are at risk of being left behind. Typically, small firms remain less digitalized than medium-size firms—and medium-size firms less than large firms. A major reason for this is that digital manufacturing solutions have been difficult to scale down (both in scope and cost) for SMEs. But even for SMEs, digital transformation is becoming a matter of survival. Over the past few years, thousands of SMEs have struggled to adapt to the new realities, including product complexity, cost reduction, and digitalization's onslaught. If SMEs don't digitally transform their business, they will be less able to profitably produce the new, more complex products their customers are demanding.

SMEs face many constraints, including:

- Inability to hire the numbers of experienced personnel they need
- Limited financial funding and budgets
- Constraints on their physical facilities—space, machinery, operational costs, etc.

Using digital technologies and creating digitalized business environments can enable SMEs to address these challenges, compete more effectively, and survive and thrive in the global marketplace.

## Digital Manufacturing Delivers Business-Critical Benefits

Digital manufacturing is the application of software systems comprised of programming, simulation, 3D visualization, analytics, and collaboration tools to plan, manage, and execute manufacturing processes and factory operations. Digital manufacturing technologies link systems and processes across all programming and production areas to create integrated manufacturing, from design to commissioning, executing production and on to servicing the final products. It includes virtual commissioning and accurate simulation of CNC machines, robots, entire production lines, safety, human ergonomics, etc.

Long-term benefits from manufacturing digitalization cannot be achieved without a comprehensive digital manufacturing strategy. By modeling and simulating processes and production lines and creating a digital thread from design to planning and production, it is possible to improve the quality of manufacturing decision-making, optimize production facilities and throughput, generate cost savings, utilize resources more flexibly, and reduce time to market.

New and innovative technologies, such as additive manufacturing and advanced robotics, are impacting how technology providers create, and SMEs implement digital manufacturing to remain competitive. Several trends are driving end-to-end digitalization using comprehensive production digital twins. In the case study below, W. A. Pfeiffer demonstrates how investing and applying digital technologies has produced a tangible return by implementing a modern digitally driven manufacturing environment.

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A key goal for many CIMdata clients is integrating product development with manufacturing using digital data. Digital manufacturing is built on a digital thread of related product definition and production process information. An effective digital manufacturing thread coupled with a production digital twin drive the digital manufacturing strategy. Techniques such as automated CNC programming using Computer-Aided Manufacturing (CAM) software and seamlessly transferring the instructions to machine tools are the core of digital manufacturing for machine shops. These methods shorten the product production timeline and enable the re-use of company expertise and increase production quality.

## CIMdata Definitions

**Digital Thread**—The communication framework that allows a connected data flow and integrated view of an asset's data (i.e., its digital twin) throughout its lifecycle across traditionally siloed functional perspectives.

**Digital Twin**—A virtual representation (i.e., digital surrogate) of a physical asset or collection of physical assets (i.e., physical twin) that exploits data flow to/from the associated physical assets.

Many SMEs are eager to implement these new digital technologies to create more efficient manufacturing processes and generate a competitive advantage. A digital thread can enable an SME to produce a digital manufacturing model to generate, simulate, analyze, and predict operational performance before investing in physical production.

Using digital twins of production and the production facility and processes enables accurate simulation and prediction of the physical twin's behavior (and that behavior is used to update and verify the models and processes). Data captured from the physical twin can be replayed within the digital twin to predict problems and to develop solutions that are then tested on the digital twin, shortening time-to-value and reducing the risk of harming or delaying the operation of physical assets and products.

Digital manufacturing solutions help SMEs refine and align their manufacturing processes and optimize the use of their production resources. Data from engineering to production, test, and quality are available in a single, logical repository giving better collaboration for design engineers, manufacturing engineers, and CNC programmers so they can speed up and optimize manufacturing.

## Siemens' Digital Manufacturing Solution

Siemens' digital manufacturing solutions are part of Siemens' Xcelerator portfolio—a comprehensive, integrated portfolio of software, services, and an application development platform. It is designed to help companies of all sizes become digital enterprises by providing solutions that can be incrementally acquired, personalized, and adapted to fit their specific business needs. Xcelerator components enable combinations of software and IoT-enabled hardware, including machine tools, to be accessed and integrated.

Importantly, Xcelerator is delivered as an integrated, modular portfolio of compatible solutions so that a company of any size doesn't need to commit significant financial resources up front—they can grow at their own pace. The solutions can be extended incrementally, in scope and scale, on-demand, and SMEs can build, at their own pace, more complete digital manufacturing environments to remain competitive with larger enterprises. SMEs can use only what is needed, when it is needed, to create and personalize the new digital environment to their unique business needs.

As the Xcelerator platform grows over time, most of its solutions will ultimately be available as a service. This will reduce operational complexity, high upfront software and infrastructure investments, and aggravation by giving SMEs access to the latest available technology when and where they need it, with operational expenses based on consumption.

## Customer Example

Headquartered in Germany, W.A. Pfeiffer is a small, highly successful company using advanced digital

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manufacturing technology. With a staff of only 29 people, Pfeiffer manufactures milled and turned parts for machinery, medical applications, and the optical industry. Owner Mr. Andreas Pfeiffer says “Parts continually become more and more complex while higher demands on production quality are being made. At the same time, our customers expect us to be able to produce small batch sizes quickly and cost-effectively. Our challenge is that we cannot simply add new capacities here at the site because we no longer have any free space.” To grow, W. A. Pfeiffer invests in new technologies. “The goal is to achieve higher production automation and end-to-end connectivity so that we can reduce set-up times and minimize throughput times,” Mr. Pfeiffer explains.

W. A. Pfeiffer has been a long-time user of Siemens manufacturing technologies—starting with SINUMERIK controls in the 1980s. They have continued to invest incrementally in digital manufacturing technologies and solutions that Siemens offers. Siemens software solutions currently deployed include Teamcenter, NX, and Mcenter (formerly SINUMERIK Integrate). Siemens Opcenter APS is used for integrated order planning, see detailed information on resources, and improve customer and supplier relationships. It also has improved their internal communications. An end-to-end digital process chain has now become a reality at W. A. Pfeiffer. Data is managed centrally from order acceptance to invoicing, and duplicate entries are eliminated.

W. A. Pfeiffer’s integrated process begins with incoming customer orders. The order is created in ERP and Teamcenter at the same time. Teamcenter imports the design data for the product to be manufactured. Needed materials are then ordered, and due dates are planned using the Opcenter APS software. “All tools work together seamlessly, which makes it much easier to coordinate,” says Mr. Pfeiffer.

Data is then transferred from Teamcenter to NX. The 3D models are prepared in NX for NC programming, and fixture components are either selected from the library or designed. The machining operations are then programmed in NX CAM, using the CAD data.

NX allows programmers to quickly define machining operations by working in the context of the digital model. Using advanced toolpath technologies helped W. A. Pfeiffer reduce the machining cycle by 25%, while extending tool life.

G-code-driven simulation in NX leverages the machine’s digital twin to verify the generated operations. This helps programmers analyze and optimize operations before they transfer them to production. The digitally validated programs ensure error-free and highly efficient part production on the shop floor.

Workers can access all functions directly in production via mobile terminals. This direct connection between planning and production continues through to CNC control. The machine programs generated by NX CAM are transferred to Manage MyResources via Teamcenter, along with lists of tools. The physical tools are managed, balanced, and, if needed, assembled and measured using Manage MyResources. The data package is then transferred to the machine controller. After a test run by the operator, the job order goes into production.

“You have much more information in the set-up phase. There are fewer ambiguities, I can immediately see which tools I need, which tools are available in which quantity, which materials I need,” Mr. Pfeiffer says. “This allows us to machine the components with minimized set-up work.”

For W. A. Pfeiffer, the investment in the new software has already paid off. “Just by analyzing our processes during the implementation, we were able to improve many processes. We no longer have duplicate data storage; we have much better transparency across all processes,” says the entrepreneur. “In the past, employees in production often had to ask: Where are the components? Which CNC machine should I use? What kind of cutting methods should I use to manufacture this component with

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minimum tool wear efficiently?” Streamlining boosted productivity. We can now answer all this with the information that the software solution provides us. I expect that we will be able to reduce setup times by up to 50% overall,” concludes Mr. Pfeiffer.

See a video interview of Mr. Pfeiffer discussing the benefits his company has achieved at <https://youtu.be/GCOwWKy--dk>.

This is just one example of how a SME has used Siemens Xcelerator to configure a custom digital manufacturing solution to enable themselves to survive and be more successful in their markets.

## Conclusion

Business pressures are forcing companies, especially SMEs, to change the way they create, manage, and leverage all their assets—human, physical, and financial. The digital thread and digital twin are concepts that SMEs are now able to implement within their environments, where and when needed, to effectively connect existing applications, data repositories, and development and manufacturing processes.

Using a digital thread-driven digital manufacturing environment enables an SME to operate more efficiently and more quickly to deliver better products with a higher value add to their customers. W. A. Pfeiffer successfully demonstrates that SMEs can actively make changes and grow and evolve their digital manufacturing environment and processes, preserving their competitive market edge and driving their business’s expansion.

Siemens Xcelerator portfolio enables the digital environment that spans the complete design and production processes, allowing manufacturers of all sizes to create and execute their business-specific digital manufacturing initiatives more effectively. It is designed to be integrated and adopted in affordable increments. SMEs only have to invest in what they need, when they need it, and then can grow their digital manufacturing environment in small, affordable increments as their business evolves, as shown in the case study about W.A. Pfeiffer. Companies of all sizes, especially SMEs, looking to improve their digital manufacturing environments and programs should include Siemens solutions in their evaluation.

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[1] Research for this commentary was partially supported by Siemens Digital Industries Software.

## ***The IoT: Connecting the Product Lifecycle***

7 February 2023

Pete Bilello, President and CEO of CIMdata, published another article in his series for Engineering.com. This article examines how the Internet of Things can connect the Product Lifecycle. He says, “A big part of the challenge of using the IoT is that it is an ever-growing collection of connections. Sooner or later, every object and all its data will go through the IoT-connected world—even things that don't yet exist.”

To read the article please visit: <https://www.engineering.com/story/the-iot-connecting-the-product-lifecycle>

The full body of work on the Critical Dozen is available on Peter’s engineering.com profile at <https://www.engineering.com/profile/PeterBilello>

## Acquisitions

### ***IBM Acquires StepZen to Help Enterprises Get More Business Value from Their Data and APIs***

8 February 2023

IBM is announcing the acquisition of StepZen Inc, which developed a GraphQL server with a unique architecture that helps developers build GraphQL APIs quickly and with less code.

Today's news marks IBM's first acquisition of 2023. Since Arvind Krishna became CEO in April 2020, IBM has acquired 30 companies to bolster its hybrid cloud and artificial intelligence (AI) capabilities.

The rising adoption of hybrid cloud has resulted in data stored everywhere – in different types of data stores like data warehouses, lakes, and lakehouses as well as across different clouds and on-premises environments. APIs serve as the essential connector between different data sources and applications, which means that businesses are relying on and creating more APIs than ever before to get the data they need to power their applications and experiences.

GraphQL has rapidly become a go-to query language for companies to interact with their data and is emerging as a new standard for APIs, layering upon the investments in REST APIs and data systems. Take an e-commerce application for example. With a single call, GraphQL can merge data that is found in different subsystems, like customer information, order numbers, and delivery status, and return it in an expected format. This simplicity is why the popularity and usage of GraphQL is growing quickly. While GraphQL APIs are significantly easier for application teams to use, they can be challenging for the teams tasked with creating them.

Founded in 2020, StepZen provides an easier way for developers to build GraphQL APIs. StepZen takes a declarative programming approach (describing WHAT the program does, without explicitly specifying HOW), which results in smaller and more intuitive code, better runtime performance, and faster time to value. StepZen was also designed to be highly flexible. It is compatible with other API approaches and is available as-a-Service (SaaS) while also supporting deployments in private clouds and on-premises data centers.

StepZen was developed by a team of industry veterans who have made key contributions to database technology including IBM Db2, PostgreSQL and Apache Derby, and have deep expertise in APIs and cloud-scale deployments. The acquisition closed on February 6, 2023, and the StepZen team and technology will become part of the IBM Software unit. Financial details of the deal were not disclosed.

StepZen is the latest example of how IBM is innovating through a combination of R&D and strategic acquisitions to deliver the data, AI, and automation solutions that businesses need in the hybrid cloud era. StepZen complements IBM's organic development in key areas including integration, API management, data fabric, and data management. For example, IBM delivered new AI testing capabilities for IBM API Connect, which analyzes your APIs, generates test cases automatically, and reports any errors that it observes, helping improve code quality and developer productivity. We believe StepZen's innovative technology for GraphQL API creation complements the innovations IBM is driving in API Connect to enable businesses to build better digital experiences for their clients.

## ***Texada Software and Uptake Canada, Inc., Merge, Creating a New SaaS Platform for the Equipment Dealership and Rental Industry***

7 February 2023

Texada Software, creators of leading SaaS rental and mobile applications for the equipment industry, today announced a merger with Uptake Canada, Inc. (also known as “Uptake Dealer,”), the equipment dealer software subsidiary of Uptake Technologies, which acquired what was formerly Canam Solutions in 2016.

An industry-leading SaaS platform for equipment dealer sales and services, Uptake Dealer provides insights to help teams better monitor machine health and planned services, avoid unplanned downtime, and improve the customer journey. Combined, the organization brings together market leaders and innovation in enterprise solutions across sales, rental, and service management. The new company, named Texada Software, will deliver a best-of-breed, full service, business management platform created by and developed for equipment industry experts.

Equipment businesses are under immense pressure to increase profitability through improved customer service, more efficient processes, and faster service delivery. These businesses require an integrated understanding of customer data and opportunities across equipment purchases and services for their fleets and rental needs. Whether the objective is to sell equipment, rent equipment, or provide services and parts, business managers are looking for a single platform that brings all facets together breaking down customer engagement silos.

“The equipment industry is eager to move away from disconnected data riddled with complexity,” said Matt Harris, CEO of Texada Software. “Dealerships and rental companies want a 360-degree understanding of customers and their interactions across the entire business. Only an integrated view will deliver operational excellence, and as a result, break down business silos. I’m thrilled that we are bringing together SaaS software leaders in rental management and dealership sales and service to manage the full lifecycle of customer possibilities.”

Texada Software has delivered rental management solutions for 40 years. Texada’s solutions seamlessly integrate an equipment rental company’s back office with its field operations, customer acquisition, and payments, enabling rental companies to have visibility into key business processes. Since 2006, Uptake Dealer has advanced sales and service for dealerships around the world. With their platform, dealerships manage both sales opportunities and assets through their respective lifecycles, including machine health, planned and unplanned service events, and sales effectiveness.

“As the equipment industry seeks to grow, fully understanding the relationship with their customers is a must have,” said Donald Charbonnet, independent equipment businesses consultant and 50-year veteran of the equipment industry. “Dealer companies sell, rent, and provide services while rental companies do the same. Yet, the applications available to manage the flow of data are all over the place. The result is a complex system of apps that do not talk to each other and ultimately cost sales or destroy service. The best businesses will have an integrated view to ensure that dealers and rental houses can maximize value for their customers.”

Leading these investments to drive growth and build business value for the equipment industry is Banneker Partners, a software investment firm based in San Francisco and Portland that acquired Texada Software in June of 2022. In August, Texada Software acquired LogiMove, creators of a next generation low-code / no-code mobile platform now called Texada Workflow with applications for field inspections and other workflows.

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“Expanding the Texada platform with Uptake Dealer’s modern cloud solutions will help customers to grow revenue, improve customer satisfaction, and increase efficiencies,” said Hugh Kirkpatrick, Principal at Banneker Partners. “It’s a privilege to support Matt and the Texada team, and to welcome Jordan Hodges, Linda Nikkel, Moacir Mendonca, and the rest of the Uptake Dealer team on this journey to transform and digitize the equipment industry.”

The acquisition is effective immediately. GrowthPoint Technology Partners acted as the exclusive financial advisor to Uptake Technologies through the transaction. More information about this announcement, platform demos, and a chance to meet with company leadership will be available at the upcoming American Rental Association show in Orlando, Florida February 11-15. Texada will be exhibiting at booth #3571.

## Company News

### ***3D Systems Announces Appointment of Dr. Rebekah Gee as Member of its Medical Advisory Board***

8 February 2023

**3D Systems** announced the appointment of Dr. Rebekah Gee to the 3D Systems Medical Advisory Board, effective March 1, 2023. Dr. Gee is a recognized expert on public health policy and was elected to the National Academy of Medicine in 2017.

Dr. Gee will join six other members of the advisory board who have been named since the board’s establishment in May 2022:

- Dr. Stephen K. Klasko, former President and CEO of Thomas Jefferson University and Jefferson Health;
- The Honorable David J. Shulkin, former U.S. Secretary of Veterans Affairs;
- The Honorable Alex Azar, former U.S. Health & Human Services Secretary;
- Dr. Toby Cosgrove, former President & Chief Executive officer of the Cleveland Clinic;
- Dr. Bon Ku, Professor of Medicine and Design at Thomas Jefferson University and Director of the university’s Health Design Lab; and
- Mr. Bert Bruce, Regional President, North America for the Rare Disease Business at Pfizer.

The board’s primary mission is to provide strategic input, guidance, and recommendations for the company’s expanding efforts in regenerative medicine. These efforts are currently focused on utilizing advanced 3D printing technologies and materials central to the manufacture of implantable human organs, human non-organ applications such as vascularized soft tissue for use in reconstruction surgery, and organs-on-a-chip for use in early-stage drug discovery and development.

Dr. Gee is a recognized leader in healthcare policy who possesses a unique blend of experience in delivering innovative healthcare solutions for families and communities, leading government healthcare institutions, and the practice of medicine. Dr. Gee is the Founder and Chief Executive Officer of Nest Health, a company that seeks to overcome the challenges faced by working families with young children in accessing much-needed healthcare services by delivering whole-family, whole-person primary care to families at home, in the community, and online.

From 2016–2020, Dr. Gee served as Secretary of the Louisiana Department of Health, the state’s largest agency with an annual budget of approximately \$14 billion. While Secretary, Dr. Gee oversaw the

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implementation of Medicaid expansion which has extended health insurance coverage to over 600,000 Louisianans. Dr. Gee has an extensive background in quality improvement and as a health services researcher who has served in numerous additional state and national healthcare policy roles. Before she was appointed Secretary, Dr. Gee served as the Medicaid Medical Director for Louisiana Medicaid, the Medical Director for Title V, and she directed Louisiana's Birth Outcomes Initiative where she led efforts to decrease infant mortality and prematurity. Her initiatives resulted in a 25% reduction in infant mortality, an 85% drop in elective deliveries before 39 weeks, and a 10% drop in NICU admissions statewide.

Dr. Gee has been a practicing Obstetrician/Gynecologist for over 20 years, which has enabled her to bring a medical caregiver's perspective to the people she serves in public policy and healthcare delivery roles. She is a gratis Professor of Public Health at LSU Health Sciences Center New Orleans. In addition to her appointment to the National Academy of Medicine, Dr. Gee was recognized by The New York Times as one of "Five Who Spread Hope" in 2019, and by Modern Healthcare as one of 2019's Women Leaders to Watch in Healthcare.

Commenting on her appointment, Dr. Jeffrey Graves, president and CEO of 3D Systems stated, "It is my great pleasure to welcome Dr. Rebekah Gee to our Medical Advisory Board. Dr. Gee has distinguished herself throughout her career by her ability to bridge the gap between the practice of medicine and the critical role that public and private institutions play in delivering healthcare and in improving health outcomes for patients. As 3D Systems moves forward with our efforts to build a world-class regenerative medicine business that will develop innovative medical products in the areas of human organ transplantation and a broad range of non-organ human applications, Dr. Gee's insights and advice on topics such as patient insurance coverage and third-party reimbursement of care providers will be invaluable. Dr. Gee will also be well-positioned to provide strategic guidance to the Medical Advisory Board on a broad range of issues, given her experience at the helm of state and national healthcare policy institutions as well her leadership role in those institutions' response to some of the largest public health challenges of our time, such as the COVID pandemic and the opioid crisis. She is an exceptional healthcare leader and we are honored to have her join us at this critical time in our programs."

In recognition of her appointment, Dr. Gee stated, "I am delighted to become a member of 3D Systems' Medical Advisory Board and to have the opportunity to play a role in the company's development of exciting new products and therapies in the area of regenerative medicine. As both a medical practitioner and a long-time leader in the public healthcare arena, I have experienced first-hand how innovation in the areas of medical devices and treatments can lead to dramatic improvements in patient health outcomes. I am honored and excited to have this opportunity to assist the company as they advance the frontier of healthcare innovation and build a world-class regenerative medicine business."

## ***Accenture Invests in Looking Glass to Accelerate Shift from 2D to 3D***

7 February 2023

Accenture has made a strategic investment through Accenture Ventures in Looking Glass Factory, a leading hologram company. Looking Glass, with headquarters in Brooklyn, New York and additional operations in Hong Kong, has developed an end-to-end holographic platform, with a lineup of displays that can show content in life-like 3D, without requiring the use of headsets or head-tracking.

Growing consumer and business interest in the metaverse as a creator economy and tool to enhance day-to-day tasks is expected to fuel a \$1 trillion revenue opportunity by the end of 2025, according to Accenture findings released in January 2023. Technology like Looking Glass offers the opportunity to connect 3D digital experiences in the metaverse to the physical world.

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Looking Glass has paired its display technology with a software suite that allows brands, designers, and consumers to showcase 3D content that is typically viewed in 2D. The fast-moving shift from 2D to 3D media could have a significant impact on the future of retail, communication, and eventually, the home, where the consumption of 3D media could become the norm. In June 2022, Looking Glass introduced the world's largest holographic display, the Looking Glass 65", which is already being used in Accenture Labs in San Francisco.

Further, the Looking Glass Blocks sharing platform enables the same content to be shared seamlessly through any internet browser and across a variety of environments: mobile, social and even the metaverse. This marks the first-ever platform for hosting and sharing 3D holograms on the internet, allowing brands to provide their fans with an immersive consumer experience anywhere, on any device.

"Looking Glass' 3D technology can be deployed in physical environments along with paired metaverse experiences to create deeper, more immersive interactions between brands and their customers," said David Treat, senior managing director and global lead of Accenture's Metaverse Continuum business group. "We believe this technology has the potential to play a valuable role in metaverse content creation and across enterprise applications that bridge the physical and digital worlds, including retail marketing and holographic communications."

In March 2022, Accenture formed the Accenture Metaverse Continuum business group, which combines metaverse-skilled professionals and deep capabilities in customer experience, digital commerce, extended reality, blockchain, digital twins, artificial intelligence and computer vision to help clients design, execute and accelerate their metaverse journeys.

"With our patented software and hardware platform that includes our Looking Glass Portrait display and the larger format Looking Glass 32" and 65", Looking Glass holograms are poised to drive the seismic shift from 2D to 3D," said Shawn Frayne, co-founder and CEO of Looking Glass. "We believe this shift will be bigger than that from radio to TV, or the shift from black and white to color. The hologram era has truly begun and joining Accenture Ventures' Project Spotlight initiative will help us drive increased enterprise adoption of the powerful brand experiences and connections that Looking Glass will deliver."

Looking Glass is the latest company to join Accenture Ventures' Project Spotlight, an engagement and investment program focused on investing in companies that create or apply disruptive enterprise technologies. In addition to funding, Project Spotlight connects emerging technology startups with the Global 2000 to fill strategic innovation gaps and offers extensive access to Accenture's domain expertise and enterprise clients, helping startups harness human creativity and deliver on the promise of their technology.

"As more companies establish and expand their metaverse presence, they're looking for ways to bring immersive metaverse experiences to their customers in the physical world, and we believe Looking Glass' holographic platform can enable them do that," said Tom Lounibos, managing director, Accenture Ventures. "We look forward to introducing our clients and ecosystem partners to the Looking Glass holographic software and hardware platform and working together to create new content, along with dynamic, customized 3D user experiences and interactions."

Terms of the investment were not disclosed.

## ***Bechtle to take up residence at new location in Munich***

9 February 2023

**Bechtle is set to move into a new location in Unterschleißheim, just north of Munich. The new Koryfeum office campus will offer some 150 employees from five Bechtle companies a home across**

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**two stories of highly modern offices. 4,200 m<sup>2</sup> of rented space have been turned into a state-of-the-art, collaborative work and meeting environment. Bechtle IT System House Munich and Solidpro will be moving there from Garching and Bechtle Network & Security Solutions GmbH from Olching respectively. Additionally, teams from Bechtle Managed Services GmbH and Bechtle Logistik & Service GmbH will also take up office at the shared site.**

With this change in scenery, Bechtle is creating a modern work space that will spark creativity while also featuring interior design to encourage collaboration between the subsidiaries. Bringing together these different teams will on the one hand create economically beneficial synergies, and on the other hand enable a more comprehensive customer service thanks to the many different specialists under one roof. This IT future hub will hence become part of an axis between new Bechtle sites in Stuttgart and Ettlingen near Karlsruhe, which will be enhanced by another site in Neu-Ulm in 2026.

“The Koryfeum office campus is an innovative and highly attractive location. It really ticks all the boxes for us as a future-first IT partner for SMEs, international corporations and the public sector. We want to offer our employees a top-notch, people-centred working environment where they can contribute their expertise, while facilitating exchange across interdisciplinary teams and supporting our customers in their digital transformation journey”, says Michael Guschlbauer, COO, IT System House & Managed Services, Bechtle AG.

## **New Work and planned cooperation with universities**

The office is designed for maximum flexibility by introducing variable project teams and a hot desking system while charging points installed on-site will support the group-wide Charge@Work programme for electric vehicles. In this way, Bechtle is able to fulfil the diverse requirements of collaborative working styles and meet the need for a mix of office-based and mobile working. Modern huddle spaces with the latest meeting technology enable effective and location-agnostic teamwork. This year, Bechtle plans to build on its touch points with Munich’s excellent universities and open its doors to students to enable close cooperation on-site in its new IT future hub.

“Making the move to Koryfeum—one of the most advanced office complexes in and around Munich—is a huge step towards meeting our Vision 2030. Our success is driven by the combination of our modern portfolio, high performing teams and the right environment. I’m looking forward to sharing our new premises with other Bechtle companies as this will strengthen the bond between us and enable us to find perfect solutions for our customers,” says Roland König, Managing Director, Bechtle IT System House Munich and Regensburg.

## ***Bricsys® and MechWorks announce strategic partnership to improve product lifecycle management***

7 February 2023

Global provider of design and collaboration solutions, Bricsys®, part of Hexagon, announced its partnership with MechWorks, part of ITI Technegroup, a WIPRO Company, to deliver an integration between Siemens’ Teamcenter® software and BricsCAD®. The solution offers industry-best features to connect BricsCAD’s processes faster and allow designers to focus on product development.

Manufacturers need new ways to stay efficient and profitable to maintain and grow their market share as products become increasingly complex. As a result of this partnership, the new Siemens’ Teamcenter® interface, named TCBB (Teamcenter Interface for Bricsys’ BricsCAD), permits users to search and load parts, assemblies, and drawings in the correct version from Teamcenter’s managed environment, introduce improvements and exchange information about a product with minimal effort.

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Following this partnership, manufacturing, procurement, and production teams can now directly access design data. This improves the product quality and gives users a holistic view, accelerating time to revenue.

Cliff Brown, Executive Product Manager at Bricsys, says: “This partnership provides the flexibility to support the highly specialized needs of our BricsCAD customers. Thanks to integrated processes that accelerate the design process at every stage of the product management lifecycle, users can reduce product time to market.”

Luca Cioni, MechWorks CEO says: “Our collaboration highlights the importance of using one integrated platform that facilitates digital PLM steps and processes. A single source of truth allows for smoother CAD data procedures and enables more intelligent and competitive time-to-market timelines.”

## ***CONTACT and Cadmatic enter into OEM partnership for the shipbuilding industry***

8 February 2023

With the partnership between CONTACT Software and Cadmatic, the global shipbuilding industry benefits from digitization solutions tailored to its specific requirements. Cadmatic is using CONTACT's low-code technology platform CONTACT Elements to provide shipyards with optimal support for digitization along the entire lifecycle of shipbuilding projects - from design and engineering, through prefabrication and production, to maintenance and operation.

The composable CONTACT Elements platform is based on open software technologies and offers a broad portfolio of future-proof industrial applications that are in use at thousands of customers in various industries worldwide. The platform provides the agility needed to flexibly adapt Cadmatic solutions to new requirements and significantly reduce the complexity of shipbuilding processes.

“CONTACT and Cadmatic are two leading experts whose products and industry experience complement each other perfectly. With this partnership, shipbuilding companies worldwide will benefit from future-proof solutions to drive their digital transformation, meet growing market and customer demands, and integrate sustainability into their value creation,” says Karl Heinz Zachries, CEO CONTACT Software.

The integration of the CONTACT Elements apps into the Cadmatic design, engineering and information management portfolio comprehensively addresses the demanding requirements of the shipbuilding industry to optimize business, engineering and development processes.

“Shipbuilding is a unique industry with unique needs and levels of complexity. Our PLM and digitalization solution will come with in-built shipbuilding intelligence with the facilitation of data use and management to effectively support the life cycle of complex engineering systems at shipyards. It will reduce the need for consultancy and implementation services that are typically required for general PLM applications on the market,” says Jukka Rantala, CEO Cadmatic.

As part of its OEM partnership with CONTACT, Cadmatic will expand its offering to include the first shipbuilding-specific PLM solution that enables customers to significantly improve quality and save time throughout the lifecycle of shipbuilding projects.

A vital pillar of the Cadmatic PLM solution is establishing a single source of truth for all ship data. Linking CAE, CAD, CAM and PDM systems significantly improves organization, management and contextualization and increases the level of digitization.

With the solution, companies benefit from higher overall quality and a reduction in the time and resources required for design and virtual prototyping. It improves modularization, flexible data management, the interaction between different teams and tools, and cyber security. It also provides

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efficient support for modern robotized fabrication and boosts integration with operational platforms.

CONTACT Elements combines long-term expertise from the automotive, high-tech, and consumer goods industries, as well as mechanical and plant engineering, medical technology, and logistics.

Cadmatic solutions combine long-term expertise from the shipbuilding, offshore, power, process plant and construction industries. The bringing together of Cadmatic's extensive expertise in the development of ship design solutions and CONTACT's expertise and agile PDM technology will deliver the most innovative shipbuilding-specific PLM solution to the market.

## ***Digital 3D touch sensor wins Hexagon's support to scale and solve industry challenges***

2 February 2023

Hexagon has announced the winner of the second cohort of its coveted Sixth Sense open innovation platform, which nurtures start-ups creating solutions to pressing manufacturing challenges.

Hexagon is a global digital reality solutions giant, whose technology empowers makers to design and manufacture better and more sustainable products. It launched the Sixth Sense open innovation platform in 2022 to support the growing demand for disruptive innovation in manufacturing. The platform offers business insight, access to experts and mentorship, as well as exposing them to Hexagon's Manufacturing Intelligence division's global customer and partner base, which includes the likes of Audi, Airbus, Meta and Zimmer Biomet.

GelSight won the competition, following an intense 10-week programme of product refinement and business development, which culminated in a pitching competition at the Hague, the Netherlands, where they presented their company and progress to a panel of judges representing experts in technology, investment and Hexagon leadership.

As part of their winning package, they will receive access to Hexagon's extensive customer base to expand their business, integrate with Hexagon products, and further resources to globalise.

Youssef Benmokhtar, CEO of GelSight, said: "Many inspections in the industry today are still performed by an inspector simply looking at or touching a part to identify, and sometimes measure, a defect. This is a subjective, non-repeatable, non-traceable process. Our gel material acts as artificial skin, providing extremely detailed and rapid surface characterisation. We have digitised the entire workflow – our technology analyses the readings to give users detailed 3D visualisation with up to 5 million data points that can help automate processes, cutting costs and time.

"Working with Sixth Sense has been such a memorable experience – we are proud and humbled to have been chosen and are looking forward to the future with Hexagon. The real work starts now."

Runner-up CASTOR's Angeliki Malizou, Director of Business Development, said: "Participating in the Sixth Sense cohort has provided us with an exceptional opportunity to take our business to new heights. Our intelligent software analyses thousands of parts at once and identifies opportunities where additive manufacturing makes sense, from a technical, economical, and sustainable point of view. Whether a company's initiatives are cost reduction, sustainability, supply chain resilience, or others, we can help engineers to scale up their additive manufacturing journey, and we look forward to furthering that journey with Hexagon."

Parth Joshi, Chief Product and Technology Officer for Hexagon's Manufacturing Intelligence division, said: "The market is in a state of flux. The industry is trying to contend with a shrinking global economy, sustainability requirements and increasingly complex customer demands, which are all piling on the pressure. To us, however, this presents an opportunity. Constraints provide fertile ground for

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innovation, and start-ups know that better than anyone. In fact, the industry as a whole can benefit from the creativity and agility they bring to the innovation process, as demonstrated by the success of our cohorts. We are excited to continue working together with budding companies and will be recruiting for the next cohort soon.”

Hexagon would also like to congratulate the rest of the cohort for their impressive pitches and dedication to growth during the programme. These innovative start-ups are: 3YOURMIND, Augmentir, JITbase, oculavis, Threedly, and Teratonics.

## ***Digital Twin Consortium and OPC Foundation Announce Liaison Agreement***

6 February 2023

At the ARC Forum 2023, Digital Twin Consortium® (DTC) and OPC Foundation announced a liaison agreement to accelerate the development and adoption of digital twin-enabling technologies. The DTC and the OPC Foundation have worked closely in several open-source reference implementation projects on GitHub and have agreed to collaborate even closer.

“We are excited about working with OPC Foundation,” said Dan Isaacs, GM, and CTO of DTC.

“Through our collaboration, we will influence interoperability standards and processes that will advance the use of digital twins in manufacturing across many industries.”

The DTC and OPC Foundation have agreed to the following activities:

- Collaborating on standardization requirements
- Realizing interoperability by harmonizing technology components and other elements
- Aligning work in horizontal domains for adoption in vertical domains and use cases, proof of concepts, and Value Innovation Platforms (VIP) programs, including:
  - Technology, terminology, and taxonomy
  - Security and trustworthiness
  - Conceptual, informational, structural, and behavioral models
  - Enabling technologies, such as simulation and AI
  - Technology stack across the digital twin lifecycle
  - Case study development
- Developing and understanding open-source reference implementations

Stefan Hoppe, President OPC Foundation, said, “The OPC Foundation maintains the global standard for secure industrial interoperability for information modeling and data exchange, which, as part of this relationship with DTC, benefits all who wish to create semantically identical digital twins. Our involvement to liaise with DTC further strengthens the user’s ability to model each data aspect quickly and precisely, creating and interacting with any digital twin. Digital twins will be fully compatible with the OPC UA framework used in the run-time components within the operational domain.”

“As one of the key contributors to Digital Twin Consortium’s open-source program, Microsoft saw the rising demand for open digital twin technology and industrial interoperability standards like OPC UA. The collaboration of OPC Foundation and DTC will continue to elevate the impact of digital twin technologies. These two organizations have already started collaborating on open-source projects and these projects will expand to include emerging technologies,” said Erich Barnstedt, Chief Architect Standards, Consortia and Industrial IoT, Azure Edge + Platform, Microsoft Corporation.

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Both consortia will exchange information through regular consultations, joint contributor relations, seminars, open-source projects, and other activities.

## ***HCLTech Named Titanium Member At The Intel® Network Builders Winners' Circle Awards***

9 February 2023

HCLTech, a leading global technology company, was named a Titanium member, the highest level of recognition, at the Intel® Network Builders Winners' Circle Awards for the second consecutive year.

HCLTech is among other top companies in the Intel® Network Builders ecosystem that have demonstrated outstanding technical innovation to accelerate the transformation of networks from core to edge. The program has driven greater technical enablement for businesses in partnership with HCLTech, and the company has been instrumental in developing cutting-edge solutions that transform networks to accelerate business transformation.

“We’re honored to be named a Titanium member in the Intel® Network Builders Winners' Circle for the second time,” said Kalyan Kumar, Chief Technology Officer, HCLTech. “This recognition is the result of countless hours of hard work and dedication from our extensive pool of experienced technologists. We look forward to our continued partnership with Intel® to deliver impactful transformation for our current and future enterprise customers.”

The Intel® Network Builders Winners' Circle program was developed to accelerate innovation and network transformation. It focuses on recognizing industry leaders through advocacy and training. This year, HCLTech was recognized for its continued effectiveness in developing and implementing enterprise solutions based on Intel's® technologies. Notable appreciation came for HCLTech's Intelligent Secure Edge for Smart Cities, Network Function Virtualization (NFV) Acceleration Software and Network Gateway solutions, among various other advanced technologies.

“As a Titanium member in our program, HCLTech's commitment to advancements in software-driven network transformation has delivered innovative, scalable and performance capabilities for telecom operators and enterprises across various industries,” said Keate Despain, Director, Intel® Network Builders Program, Intel®.

Over the near two-decade relationship, HCLTech and Intel® have brought transformative value to customers across industries such as energy and utilities, retail, telecom, manufacturing and banking and financial services. The companies have collaborated to leverage advanced hardware and software technologies from Intel® and high-end engineering and services capabilities from HCLTech to innovate on critical projects that have enabled customers to be future-ready with best-of-breed technologies and early adoption strategies that have helped speed up their time to market.

## ***Leica BLK2FLY selected as finalist in CONEXPO-CON/AGG inaugural Next Level Awards program***

6 February 2023

**Leica Geosystems, part of Hexagon, a global leader in digital reality solutions, today announced that CONEXPO-CON/AGG and the International Fluid Power Exposition (IFPE) have selected the Leica BLK2FLY as one of the top 10 finalists for the Next Level Awards Program. The CONEXPO-CON/AGG Next Level Awards celebrate exhibiting companies that are pushing the boundaries and developing next-level products, technologies and services designed to advance the**

## **construction industry.**

“For the past several years, we have been on a mission to democratize reality capture with the BLK product series, including the BLK2FLY, the world’s first autonomous flying laser scanner. Having the product short listed for the Next Level Awards is thrilling and yet wouldn’t be possible without the insight gained from working with construction leaders all over the world,” said Craig Martin, President US/Canada at Hexagon’s Geosystems division.

With a few simple taps on a tablet, users can quickly, easily and accurately capture and scan features and dimensions of sites and structures that would otherwise be dangerous or inaccessible for humans. Advanced obstacle avoidance and the ability to determine optimal scan routes make the BLK2FLY the most effective aerial reality capture solution for civil engineering companies. The flying laser scanner documents heavy construction sites, buildings, rooftops, facades and other environments with improved accuracy and detail, enhanced safety and increased efficiency.

“We’re excited to recognize these innovative construction products that are taking the industry to the next level,” said Dana Wuesthoff, CONEXPO-CON/AGG show director. “And March 14-16, it will be in the hands of CONEXPO-CON/AGG attendees to determine the Contractors’ Top Choice.”

The Leica BLK2FLY will be recognized with signage in the event’s booths – [N-12325](#) – so show attendees can vote on-site to determine the Contractors’ Top Choice. Attendees will be able to scan a QR code and vote for their favorite entry.

The Leica BLK2FLY was selected by a diverse panel of Associated General Contractors of America (AGC) members. They judged based on three criteria:

1. Addresses a common industry need in a unique and innovative way.
2. Benefits the industry across multiple applications for industry wide adoption.
3. Positively impacts the safety, sustainability and workforce of the industry.

## ***LTIMindtree Achieves Guidewire PartnerConnect Program Specialization***

9 February 2023

LTIMindtree, a global technology consulting and digital solutions company, announced that it has achieved the Guidewire PartnerConnect Testing Standards specialization.

LTIMindtree is a Guidewire PartnerConnect Consulting partner at the Select level and works with Guidewire in North America and India. By recognizing its enterprise test solutions through the specialization, LTIMindtree will offer a winning edge to global insurance companies in their transformation journey using the Guidewire platform.

Specializations are regionally based and require partners to demonstrate skills, knowledge, and competency in a particular Guidewire product or solution area. The achievement of specializations enables insurers to have more clarity and insight into which partners have proven capabilities in a region or globally in the case of the Testing Standards specialization. In addition, partners with specializations can better promote their capabilities across Guidewire products and solutions.

“We congratulate LTIMindtree on achieving their most recent Testing Standards specialization within our PartnerConnect Consulting program. We are pleased to recognize their expertise and proven capabilities and look forward to continuing our work together to contribute to the success of our mutual customers,” said Molly Black, Senior Director, Partner Programs and Enablement, Guidewire Software.

David Althoff, Chief Business Officer, Insurance, LTIMindtree, said “LTIMindtree is excited to make

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continuous progress on building Guidewire capabilities. Our understanding of the insurance domain, experience with core admin platform transformation projects, and specializations in Guidewire Products will empower us to help insurers accelerate their transformation programs efficiently and predictably.”

## ***MathWorks Donates \$2.4 Million to Support Mass Audubon's Efforts to Protect and Care for Climate-Resilient Landscapes***

7 February 2023

MathWorks has made a \$2.4 million gift to Mass Audubon, New England’s largest nature-based conservation organization, to protect and care for climate-resilient lands across Massachusetts.

Conserving lands for the benefit of people, wildlife, and the climate is a priority of Mass Audubon’s Action Agenda, which calls for:

- Protection of 30 percent of Massachusetts by 2026 through a public/private coalition (150,000 new acres);
- Increasing the pace of Mass Audubon’s land protection fourfold (10,000 new acres);
- Enhancing the management of 200,000 acres of forestlands for wildlife and climate resilience, while meeting the economic needs of landowners;
- And restoring, protecting, and managing 2,500 coastal acres.

These goals align with the Green Initiatives program within MathWorks’ Social Mission. The \$2.4 million donation significantly elevates the scale of the Natick-based company’s commitment to Mass Audubon and its land conservation and climate work.

“As an eco-conscious company and local community leader, MathWorks is working with local partners to preserve and protect our environment,” said Jeanne O’Keefe, SVP and CFO of MathWorks. “We’re excited to contribute to Mass Audubon’s Action Agenda to aid in their protection of climate-resilient landscapes and indigenous species in our home state.”

Specifically, the funding will help Mass Audubon conserve four properties—including Porcupine Woods in Princeton and the Minery Family Lands in Sandisfield and Otis—all of which are connected to expanses of existing protected land. In addition to that connectivity, the state has designated each property as a Critical Natural Landscape, and three are also designated as important habitats for rare species.

Mass Audubon President David J. O’Neill lauded MathWorks for its gift. “This generous and timely support is an absolute game-changer,” O’Neill said. “Large-scale land protection is a primary nature-based solutions strategy in taking on climate change. So we are thrilled to have MathWorks as a partner who truly understands this and is committed to supporting meaningful climate action.”

“It’s crucial to accelerate the pace and scale of land protection if we are going to make an impact,” O’Neill stressed. “Mass Audubon couldn’t be more grateful that MathWorks, an international leader in its field, is also showing leadership in its home state on behalf of conservation and the climate.”

## ***Oracle to Invest US \$1.5 Billion to Meet Cloud Computing Demand in Saudi Arabia***

6 February 2023

To meet the rapidly growing demand for its cloud services, Oracle today announced plans to open a third public cloud region in Saudi Arabia. Located in Riyadh, the new cloud region will be part of a planned US \$1.5 billion investment from Oracle to expand cloud infrastructure capabilities in the

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Kingdom. The Oracle Cloud Riyadh Region will join the existing Oracle Cloud Jeddah Region and the planned Oracle Cloud Region to be located in the futuristic city of NEOM.

This investment is included in an MoU that Oracle has signed with the Ministry of Communications and Information Technology (MCIT) to help Saudi Arabian businesses take advantage of the latest innovations in the cloud. The MoU was signed during Oracle CEO, Safra Catz's recent visit to Riyadh in the presence of His Excellency Eng. Haitham AlOhal, Vice Minister, Ministry of Communications and Information Technology (MCIT).

To quickly meet the requirements of its growing cloud business in Saudi Arabia, Oracle will also expand the capacity of the Oracle Cloud Jeddah Region.

“In the last century, Saudi Arabia transformed its economy by developing the infrastructure needed to produce, refine, process and transport hydrocarbons. This century we are committed to creating the digital infrastructure that will underpin future economies,” said His Excellency Khalid Al-Falih, Minister of Investment. “Oracle's decision to expand its cloud computing capacity in the Kingdom will play a key role in unlocking the opportunities that rapid technological advancements are creating. MISA will continue in its quest to enable the building of a robust digital infrastructure, by creating an attractive environment for these investments—for example, by establishing special economic zones that are tailored to particular industries such as cloud computing and digital transformation.”

As part of the MoU, Oracle will also work with MCIT and the Communications and Information Technology Commission (CITC) to establish a commercial and operational model for an additional cloud region in Saudi Arabia that is aligned with Saudi government requirements and local data residency regulations. Oracle will also work with MCIT to help foster the development of Saudi Arabia's cloud industry.

Unique among hyperscale providers, Oracle Cloud Infrastructure (OCI) offers customer choice to deploy OCI based on regulations, data residency, or latency requirements. OCI distributed cloud includes its public regions, Dedicated Region, Oracle Exadata Cloud@Customer, multicloud offerings, and recently-announced Oracle Alloy.

“Oracle's investment will rapidly accelerate the cloud transformation across Saudi Arabia's business and public sector,” said Richard Smith, Executive Vice President, Technology – EMEA, Oracle. “Oracle Cloud delivers pioneering innovation in technologies like AI, Machine Learning, and IoT, and it will help fuel the economic growth and digital transformation that is an integral part of the Saudi Vision 2030.”

## **A Focus on Driving Sustainable Operations Across the Globe**

Underscoring its ongoing focus on sustainability, Oracle has committed to powering all worldwide Oracle Cloud Regions with 100 percent renewable energy by 2025. Several Oracle Cloud regions, including regions in North America, South America, and all 10 regions in Europe, are already powered by 100 percent renewable energy, which enables customers to run their computing services more sustainably and with a lower carbon footprint. To further advance its commitment to sustainable operations, Oracle recycled 99.9 percent of its retired hardware in FY'22.

## **Oracle Cloud's Rapidly Growing Global Footprint**

Oracle provides a broad and consistent set of cloud services across 41 commercial and government cloud regions in 22 countries on five continents to serve its growing global customer base. OCI currently operates 34 commercial regions and seven government regions, in addition to multiple dedicated and national security regions.

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Currently available Oracle Cloud Regions:

- **Asia Pacific:** Tokyo (Japan), Osaka (Japan), Seoul (South Korea), Chuncheon (South Korea), Mumbai (India), Hyderabad (India), Sydney (Australia), Melbourne (Australia), Singapore (Singapore)
- **Americas:** San Jose (United States), Phoenix (United States), Ashburn (United States), Chicago (United States), Toronto (Canada), Montreal (Canada), São Paulo (Brazil), Vinhedo (Brazil), Santiago (Chile), Querétaro (Mexico)
- **Europe:** Frankfurt (Germany), London (United Kingdom), Newport, Wales (United Kingdom), Zürich (Switzerland), Amsterdam (The Netherlands), Marseille (France), Stockholm (Sweden), Milan (Italy), La Courneuve, Paris (France), Madrid (Spain)
- **Middle East:** Jeddah (Saudi Arabia), Abu Dhabi and Dubai (U.A.E), Jerusalem (Israel)
- **Africa:** Johannesburg (South Africa)
- **Government:** Two general U.S. Government regions, three U.S. Department of Defense specific Government regions, several U.S. National Security regions, and two United Kingdom Government regions (London and Newport, Wales)

## ***Rockwell Automation Elects Alice L. Jolla to Board of Directors***

9 February 2023

Rockwell Automation, Inc., the world’s largest company dedicated to industrial automation and digital transformation, announced that Alice L. Jolla was elected to its board of directors effective Feb. 8, 2023. Jolla is the Chief Accounting Officer and Corporate Vice President for Microsoft Corp.

“Alice’s proven track record serving as the management liaison to the Microsoft Audit Committee makes her an excellent addition to Rockwell’s Board of Directors,” said Blake Moret, Chairman and Chief Executive Officer of Rockwell. “Her financial experience with SaaS business models, her leadership, and her commitment to Diversity, Equity, and Inclusion will further strengthen our governance capacity and the evolution of our culture.”

Jolla has more than 30 years of business and finance experience, with particular focus on accounting, compliance, strategic planning, financial analysis, and overall risk management. She joined Microsoft, a \$198 billion technology company, in 2007 and now leads a global team responsible for accounting and financial reporting, business intelligence, and various risk management assessments. Jolla started her career in commodity chemicals at Dow Inc. and Union Carbide Corp., and she completed a fellowship with the Financial Accounting Standards Board.

Jolla holds a bachelor’s degree in accounting from Louisiana State University and an MBA from the University of Charleston.

## ***Tech Mahindra to Establish its First Data & AI and Cloud Center of Excellence in Saudi Arabia***

8 February 2023

Tech Mahindra, a leading provider of digital transformation, consulting, and business re-engineering services and solutions, has signed a Memorandum of Understanding (MoU) with the Ministry of Communication and Information Technology (MCIT), Saudi Arabia to establish a Data & AI and a Cloud Center of Excellence (CoE) in Riyadh. The CoE will combine academic and socio-economic

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goals to build national Hi-tech talent capacity, create high quality jobs, promote digital innovation and upscale small & medium enterprises.

The MoU was signed between Ibrahim N. Al-Nasser, Deputy Minister for Technology of MCIT, and Ram Ramachandran, Head -Middle East & Africa, Tech Mahindra, in the presence CP Gurnani, MD and CEO, Tech Mahindra. The MoU signing was also attended by Saudi government officials and top management team of Tech Mahindra. Data & AI and Cloud CoE by Tech Mahindra will enable accelerated and sustainable adoption of Data Analytics & Ethical AI. It will further drive cloud-enabled transformation across industries to develop local assets, Intellectual Property (IP) and promote a cognitive approach across smart services to contribute to Saudi Vision 2030's digital-led transformation objectives.

**Haitham AlOhal** Vice Minister at MCIT, Saudi Arabia, said, "*Adoption of Cloud, Data and AI will play a major role in Saudi Arabia IT and Digital Growth. We are very pleased to announce this initiative with a digital leader Tech Mahindra, which will bring global expertise and assets to Saudi Arabia and enable talent and IP creation over the next years.*"

**CP Gurnani, MD and CEO of Tech Mahindra**, said, "*The world of Data & AI and Cloud is rapidly changing with the shifting priorities of public and private sectors globally and locally in Saudi Arabia. Some levers of this change in priorities include building new IPs and assets, bringing innovation and more importantly training & upskilling local talent. Our partnership with MCIT to establish the CoE will help in addressing the fast-changing digital transformation need of Saudi Arabia. In line with Saudi Vision 2030, we look forward to partnering with MCIT and local Universities to create an ecosystem that is diverse and digital first.*"

Tech Mahindra will host design thinking workshops, hackathons around Data & AI and Cloud to nurture innovation and accelerate the Kingdom's transformation to a digital economy. The partnership will provide training and development for 2500 Saudi nationals by providing project deployment programs that enhance skills and develop careers in Data & AI and Cloud.

This partnership is in line with Tech Mahindra's DigitALL philosophy for comprehensive Business Transformation. As part of NXT.NOW™ framework, which aims to enhance 'Human Centric Experience', Tech Mahindra focuses on investing in emerging technologies and solutions that enable digital transformation and meet the evolving needs of its customers.

## Event News

### ***Altair Announces Future.Industry 2023 Global Flagship Event***

8 February 2023

Altair, a global leader in computational science and intelligence is pleased to announce [Future.Industry 2023](#), the company's flagship annual event, that will take place virtually on March 8-9. The event will explore the latest megatrends impacting our world, and dive into how the convergence of simulation, high-performance computing (HPC), AI, and data analytics can unlock the full potential of organizations' technology investments.

"Future.Industry is the biggest event of the year for Altair, where we – alongside some of the world's top thinkers – showcase the creative disruption, technologies, and ideas that are revolutionizing the way people live and work," said James R. Scapa, founder and chief executive officer, Altair. "We look forward to exploring the innovations that drive positive change in all corners of the globe and in all industries."

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Featured speakers and topics:

- **Sheryl Connelly, futurist and global consumer trends expert:** “Demystifying the Future”
- **Sandy Carter, senior vice president and channel chief, Unstoppable Domains:** “The Metaverse, Convergence of AI and Engineering, and Other Trends”
- **Dr. Vikram Shyam, futurist, NASA Glenn Research Center:** “A Future Beyond Convergence Exploring Biocene – the Age of New Life”
- **Dr. Carlo Cavazzoni, head of research and development, Leonardo S.p.A.:** “Converging HPC and Cloud Infrastructure for Engineering Applications in Aerospace and Defense”
- **Martha Bennett, vice president and principal analyst, Forrester:** “Be Future Fit with Data and Analytics”
- **David E. Martin, manager of industry partnerships and outreach, Argonne National Laboratory:** “Impact of Leadership Computing on Science and Industry”
- **Doodong Kim, senior researcher for vehicle component solutions, LG Electronics:** “Development of Data-Driven Platform for Structural Reliability Verification”
- **Hod Lipson, professor, Columbia University:** “Open AI and Trends in Engineering and AI”

At Future.Industry 2023, attendees will also hear from presenters from premier organizations such as Google, Intel, Eaton Research Labs, NVIDIA, John Deere, AMD – and more – along with Altair experts and executives as they discuss today’s biggest trends and technologies. The event is geared toward audiences of all levels and disciplines, and will offer high-level content as well as specialized industry- and topic-specific presentations and panels – something interesting for everyone.

Future.Industry 2023 will take place in three time zones covering the AMER, EMEA, and APAC regions, and will feature live audio translations into French, Spanish, German, Italian, Portuguese, Japanese, Chinese, and Korean. This year’s event is sponsored by Google Cloud, Intel, AMD, NVIDIA, and Oracle. Media sponsors include Develop3D, Scientific Computing World, HPCWire, SemiWiki, and insideHPC.

To learn more about Future.Industry 2023 and to register for the event, visit <https://events.altair.com/future-industry-2023/>.

## ***Dassault Systèmes’ 3DEXPERIENCE World 2023: Connecting Emotion, Innovation and Creation for a More Sustainable World***

10 February 2023

Dassault Systèmes announced that 3DEXPERIENCE World 2023, its annual event dedicated to the 3DEXPERIENCE Works and SOLIDWORKS community, will gather thousands of designers, engineers, entrepreneurs, makers and business leaders in Nashville, Tennessee February 12-15 to learn, imagine, celebrate and collaborate. More than 10,000 people are expected to attend the event on-site and online.

SOLIDWORKS and the 3DEXPERIENCE Works portfolio solutions are enabling innovators across the globe to work together and share meaningful causes, goals and visions in a network effect that amplifies an individual’s impact on innovation and job creation and their contribution to healthy and sustainable economies. Through a dynamic four-day agenda, 3DEXPERIENCE World 2023 will delve into the latest technological advances that are connecting emotion, innovation and creation to enable this sustainable future.

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Inspirational talks from thought leaders, more than 320 technical training sessions and 30 meet-up sessions, certification opportunities, and a partner “playground” showcasing sustainable innovations will offer attendees new avenues to learn from experts, to develop, hone and expand skills, and to connect with peers and technology partners. Event highlights include:

- Keynote speeches from inventor and founder of Ring, Jamie Siminoff – creator of the world’s first Wi-Fi video doorbell – and from scientist, philanthropist and former professional poker player Liv Boeree;
- Insights from Dassault Systèmes executives Bernard Charlès, Chairman & CEO; Gian Paolo Bassi, Senior Vice President, 3DEXPERIENCE Works; Manish Kumar, CEO and Vice President R&D SOLIDWORKS; and Suchit Jain, Vice President, Strategy and Business Development, 3DEXPERIENCE WORKS;
- Customer stories from Boston Scientific, e-Novia, Northern Industrial Manufacturing, Behlen Manufacturing, ExoSapien, and more;
- Demos and discussions on newly released product capabilities in 2023;
- Winners of the Student Model Mania Challenge;
- An “education zone” featuring innovations by Vanderbilt University and Louisiana Tech University.

In addition, three sessions will be dedicated to key domains – highlighting actual customer needs and the Dassault Systèmes technologies that are being used to address them:

- “Simulation Without Limits”: Adding simulation to the product development process enables designers and engineers to address challenges, make better decisions, and reach optimal designs faster. Features experts from PES and Resemin.
- “Futureproof Your Manufacturing”: How the industry can overcome the growing skills gap and resulting labor shortages, and how technology can help. Features experts from American Manufacturing Renaissance, Behlen Manufacturing, Mavens of Manufacturing, MetalQuest Unlimited, Inc., Northern Industrial Manufacturing, Titans of CNC, and Todd White Metal Works.
- “The Future of Design”: Updates on the SOLIDWORKS design and collaboration tools that provide the flexibility to develop and bring products to market on desktop or cloud. Features experts from Boston Scientific, House of Design, Sealed Air, Storyteller Overland, and X Custom Engineering.

“The journey from ideation to creation starts when we’re free to imagine how things could be, instead of how they are. When we possess the tools that enable us to imagine together, relationships transcend into experiences. Collaboration and creativity become one, creating a spark capable of propelling human progress forward,” said Gian Paolo Bassi, Senior Vice President, 3DEXPERIENCE Works, Dassault Systèmes. “This year’s 3DEXPERIENCE World is about imagining all we can achieve together. After two years of being physically apart, we are creating an on-site experience where our community can reconnect through the power of experience, discover the power of the 3DEXPERIENCE platform, and create a more sustainable future through the power of community.”

## ***EAGLE POINT SOFTWARE FOCUSES ON MANUFACTURING INDUSTRY AT UPCOMING 3DEXPERIENCE® WORLD***

7 February 2023

Eagle Point Software, creator of the Pinnacle Series e-learning solution, is a sponsor of the upcoming 3DEXPERIENCE® World to be held February 12-15, 2023, in Nashville, TN. This event gathers thousands of designers, engineers, entrepreneurs, and innovators, all looking to find technologies and solutions to push the manufacturing industry forward.

John Biver, President and CEO of Eagle Point, explained, "Manufacturing is a growing area of focus for our company and is an industry that truly benefits from the Pinnacle Series solution. Our clients in the manufacturing space have shared how our innovative technology is helping to shape the world of product development and is driving productivity within the industry."

Steve Biver, COO at Eagle Point, shared more specifically how the company is working with clients within the industry. "We have continued to expand our team of manufacturing experts over the past few years, as we identified that Eagle Point can address the needs and help solve many of the challenges that manufacturing professionals face. We are dedicated to creating, managing, and planning content for our manufacturing client base and developing solutions to enable organizations to improve their use of design technologies, including SOLIDWORKS."

Steve continued, "Our team at Eagle Point continues to lead via innovation, and we are excited to share more of our solutions that directly address the challenges that companies face today in the manufacturing industry. 3DEXPERIENCE® World is sure to be an outstanding event."

Pinnacle Series is an [AEC and manufacturing e-learning solution](#) that features a comprehensive library of videos, documents, and other manufacturing development resources that enable long-term employee training, on-demand problem-solving, and digital transformation.

## ***ENDUROFRAME Conference: March 2023***

8 February 2023

ENDUROFRAME Conference 2023 will be held March 22–24 at the Melbourne Polytechnic Conference Centre in Melbourne, Australia. Planning to attend? See how the IntelliCAD engine is used in the BlueScope Steel ENDUROFRAME® system on Friday, March 24 by checking out the workshop for using ENDUROCAD. ENDUROFRAME's design software, ENDUROCAD, uses IntelliCAD to visualize its 3D steel models and to generate detailed site drawings.

- [Get conference details here >>](#)
- [Learn more about ENDUROCAD >>](#)

ENDUROCAD software is part of the ENDUROFRAME system, which is used for manufacturing light gauge steel frames and includes a complete package of design software, production management software, rollformer, accessories, and support. ENDUROCAD software is based on the IntelliCAD engine. To learn more about using IntelliCAD as a native .dwg platform, go [here](#).

## ***HONEYWELL ANNOUNCES PARTICIPATION AT UPCOMING INVESTOR CONFERENCES***

9 February 2023

Honeywell announced its participation at upcoming investor conferences in February. Greg Lewis, senior vice president and chief financial officer of Honeywell, will present at Citi's 2023 Global Industrial Tech and Mobility Conference in Miami, Florida on Tuesday, February 21, 2023, from 8:00 a.m. - 8:40 a.m. EST.

Mr. Lewis will also present at the Barclays Industrial Select Conference in Miami, Florida, on Wednesday, February 22, 2023, from 8:00 a.m. - 8:30 a.m. EST.

Real-time audio webcasts of the presentations can be accessed at <http://www.honeywell.com/investor>, where related materials will be posted prior to the presentations and a replay of the webcasts will be available for 30 days following the presentations.

## ***Infosys Foundation USA Announces Crossroads 2023 Conference in Tempe, AZ***

7 February 2023

Infosys Foundation USA, a non-profit organization focused on bridging the digital divide in America, today announced the 2023 edition of its [Crossroads](#) conference series, which will be held from February 7-10th at the Infosys Tempe Innovation Hub on the Arizona State University campus. The invitation-only conference brings together over 200 distinguished participants from local and regional government, the business community, non-profit sector, and K-12 and higher education instructors to discuss ways to expand computer science education and digital skills for underrepresented communities. The event will also feature an evening reception at the Arizona Heritage Center to raise money for the Boys and Girls Club of the Valley, with the Infosys Foundation offering match donations.

“The future is digital. Employers – in Arizona and across the nation – expect the upcoming workforce to bring new digital skills to the table,” said Inderpreet Sawhney, Chairperson of the Infosys Foundation USA. “But with only 53% of public high schools in the US offering foundational computer science courses, there is clearly a gap between educational pathways and industry demand. The Crossroads 2023 conference will bring together influencers, implementors, and decision makers to identify practical, implementable solutions that push the frontier of innovation in computer science education. The Foundation is excited to host this event rooted in collaboration and catalyst for a more inclusive future.”

“The Foundation is thrilled to be welcoming back our community of committed professionals and educators who are advocating for computer science, STEM and digital skills to be an essential component of education to prepare K-12 students for the technology-enabled world,” said Kate Maloney, Executive Director, Infosys Foundation USA. “Our goal for this event is to have participants leave with inspired, concrete ideas for how we can effectively expand K12+ computer science pathways for all. The Foundation is committed to building a digitally-inclusively future and this requires all stakeholders to work cohesively to bridge the gap. We want Crossroads 2023 to be the springboard to a new future that shifts the landscape of CS education.”

Crossroads 2023 is part of the Infosys Foundation USA’s ongoing efforts to bridge the digital skills gap, in line with Infosys’ ‘ESG Vision 2030’ commitment to bring digital skills to 10 million by 2025. The Foundation works towards its goals through educator training, national awards and advocacy, innovative partnerships with leading non-profits, and its free digital learning platforms – the Pathfinders Online Institute and the Digital Academy.

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To learn more about the event, please visit: <https://www.infosys.org/infosys-foundation-usa/initiatives/crossroads.html>.

## ***PROSTEP INSIGHT DAYS ON 22 AND 23 MARCH 2023 ONLINE AND LIVE***

9 February 2023

On March 22 and 23, 2023, PROSTEP will provide customers and interested parties with an insight into its current range of solutions and consulting services at the PROSTEP INSIGHT DAYS. The central theme of the event is the digital thread within the company and in the supply chain. PROSTEP will present innovative integration concepts to participants and demonstrate their implementation using the Mars Rover test bed. The two-day event will take place online, but with live presentations, professional moderation and the opportunity for interaction. On the evening of the first day there will also be a recap session in English. Participation in the online event is free of charge.

At the request of numerous participants, the company has this year combined the traditional PROSTEP TECHDAY and PROSTEP CONSULTING DAY into a single event with a common guiding topic: the challenges posed by the digital thread. "The topic is in line with our vision as a leading PLM consulting and software company. We want to pave our customers' way to innovation leadership with the digital thread," says Joachim Christ, Director Marketing. "Both our range of strategic consulting services and our comprehensive solution offering are geared to this aim."

The PROSTEP INSIGHT DAYS are divided into two parts. On the first day, the PLM experts will present solutions that address various aspects of the digital thread: On the one hand, it is about overcoming system boundaries in heterogeneous system landscapes, on the other hand, it is about organizing data exchange and collaboration across domain and company boundaries. Participants will also learn about the roadmap for the further development of PROSTEP solutions and the company's cloud strategy.

Several customers will report on how they are mastering the challenges posed by digital thread. Participants will also find out more about how PROSTEP's cloud strategy impacts on the further development of its software.

The second day of the event will focus on the further development of ALM and PLM infrastructures at manufacturing companies. PROSTEP consultants will give short presentations describing the support they provide to customers in the context of designing sustainable modular PLM architectures. Topics such as the development of system-neutral information models, the integration of PLM and application lifecycle management (ALM), and the integration of tools and methods of model-based systems engineering (MBSE) will be addressed. Participants will also learn how they can successfully and efficiently set up their PLM initiative with PROSTEP.

PROSTEP customers and interested parties can look forward to two exciting PROSTEP INSIGHT DAYS with interesting live presentations and no long-winded PowerPoint presentations! As in previous years, Julia Bauer will ensure that the event is professionally moderated. Participants can actively participate and ask questions any time, the answers to which will be provided live. Details about the event and the agenda will be posted on [our homepage](#) and [our social media channel](#).

## ***Rockwell Automation to Present at Barclays Industrial Select Conference***

7 February 2023

Rockwell Automation, Inc. Chairman and CEO, Blake Moret, will present at Barclays Industrial Select Conference on Wednesday, Feb. 22, in Miami, Florida.

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The fireside chat will be webcast beginning at approximately 9:45 a.m. EST and will be available on the Rockwell Automation Investor Relations website at [www.rockwellautomation.com/en-us/investors.html](http://www.rockwellautomation.com/en-us/investors.html).

## ***Rockwell Automation to Present at Citi's 2023 Global Industrial Tech and Mobility Conference***

6 February 2023

Rockwell Automation, Inc. Chairman and CEO, Blake Moret, will present at Citi's 2023 Global Industrial Tech and Mobility Conference on Tuesday, Feb. 21, in Miami, Florida.

The fireside chat will be webcast beginning at approximately 11:20 a.m. EST and will be available on the Rockwell Automation Investor Relations website at [www.rockwellautomation.com/en-us/investors.html](http://www.rockwellautomation.com/en-us/investors.html).

## **Financial News**

### ***AECOM reports first quarter fiscal 2023 results***

6 February 2023

AECOM, the world's trusted infrastructure consulting firm, reported first quarter fiscal 2023 results.

<i>(from Continuing Operations; \$ in millions, except EPS)</i>	<b>First Quarter Fiscal 2023</b>			
	<b>As Reported</b>	<b>Adjusted<sup>1</sup> (Non-GAAP)</b>	<b>As Reported YoY % Change</b>	<b>Adjusted<sup>1</sup> YoY % Change</b>
Revenue	\$3,382	--	4%	--
Net Service Revenue (NSR) <sup>2</sup>	--	\$1,593	--	8%
Operating Income	\$152	\$194	(10%)	10%
Segment Operating Margin <sup>3</sup> (NSR)	--	14.0%	--	+40 bps
Net Income	\$88	\$120	(26%)	(7%)
EPS (Fully Diluted)	\$0.62	\$0.86	(23%)	(3%)
EBITDA <sup>4</sup>	--	\$224	--	8%
Operating Cash Flow	\$120	--	(38%)	--
Free Cash Flow <sup>5</sup>	--	\$84	--	(49%)

## First Quarter Fiscal 2023 Highlights

- Revenue increased 4% to \$3.4 billion, operating income decreased 10% to \$152 million, the operating margin decreased 70 basis points to 4.5%, net income decreased 26% to \$88 million and diluted earnings per share decreased 23% to \$0.62.
- Organic net service revenue<sup>2</sup> growth accelerated to 8% and included 9% growth in the design business, which was driven by accelerating growth in the Americas and continued strong growth in International markets.
- The design business had a 1.3 book-to-burn ratio<sup>6</sup> and design backlog increased by 9%<sup>7</sup> to a record high, including strong growth in both the Americas and International markets.
  - The Company's pipeline of opportunities expanded at an even faster rate than backlog and NSR, including nearly 30% growth in proposals and submitted bids, which is up from 20% growth in the prior quarter and is a strong leading indicator of continued backlog and NSR growth.
- The segment adjusted<sup>1</sup> operating margin<sup>3</sup> increased by nearly 40 basis points to 14.0%, setting a new high for a first quarter.
  - This performance reflects strong execution and accelerated investments to deliver on a growing pipeline of opportunities.
- Adjusted<sup>1</sup> EBITDA<sup>4</sup> of \$224 million and adjusted<sup>1</sup> EPS of \$0.86 were consistent with expectations and included strong underlying operational growth.
  - Adjusting for the lower first quarter tax rate in the prior year, adjusted EPS increased by 8% and 13% on a constant-currency basis.

## Cash Flow, Balance Sheet and Capital Allocation Update

- Operating cash flow was \$120 million and free cash flow<sup>5</sup> was \$84 million.
- The Company's capital allocation policy is built on the continued intent to return substantially all available cash flow to stockholders through share repurchases and dividends.
  - The Company executed additional share repurchases in the quarter and has now repurchased approximately \$1.5 billion of stock since September 2020 when share repurchases commenced, which represents more than 16% of shares outstanding.
  - As part of its quarterly dividend program, the Company paid a quarterly cash dividend of \$0.18 per share in January, which marked a 20% increase over the prior quarterly dividend and reflected the Company's commitment to increasing its quarterly dividend by a double-digit percentage annually.

## Fiscal 2023 Financial Guidance and Long-Term Fiscal 2024 Financial Targets

- AECOM reiterated its financial guidance for fiscal 2023, which includes an expectation to deliver another year of record profitability, accelerating NSR growth, continued margin expansion and strong per share profit growth. The Company's guidance includes expectations for:
  - Full year organic NSR<sup>2</sup> growth of approximately 8%.
  - An adjusted<sup>1</sup> operating margin of approximately 14.6%, which would be a 40 basis point

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- increase from fiscal 2022 and includes investments to expand the Company's competitive advantage and to capitalize on a record pipeline of opportunities.
- Adjusted<sup>1</sup> EBITDA<sup>4</sup> of between \$935 million and \$975 million, an increase of 10% on a constant-currency basis at the mid-point.
  - Adjusted<sup>1</sup> EPS of between \$3.55 and \$3.75, an increase of 10% on a constant-currency basis at the mid-point; EPS guidance does not include a benefit from incremental share repurchases expected in the remainder of fiscal 2023.
  - Other assumptions incorporated into guidance:
    - An average fully diluted share count of 141 million, which reflects only shares repurchased to date.
    - An effective tax rate of between 24% and 26%.
  - The Company continues to expect free cash flow<sup>5</sup> of between \$475 million and \$675 million, reflecting a continued high conversion of earnings to cash flow.
  - The Company also reiterated its financial targets for fiscal 2024, which include an expectation to deliver adjusted<sup>1</sup> EPS of \$4.75+ and a 15% segment adjusted operating margin, as well as long-term targets for a segment adjusted operating margin of 17% and return on invested capital<sup>8</sup> of 17%.

“Our *Think and Act Globally* strategy continues to result in consistently strong financial performance, highlighted by accelerating organic NSR growth, strong profitability and cash flow, and a record design backlog and pipeline of opportunities,” said Troy Rudd, AECOM's chief executive officer.

“Importantly, through the execution of our strategy, we are leveraging our competitive advantages to favorably transform the composition of our wins and backlog and to expand the long-term earnings power of the business. This includes our sharp focus on allocating our time and capital to winning what matters, including prioritizing pursuits and clients with the highest lifetime value potential. As a result, our backlog and pipeline growth have accelerated, our visibility for growth and continued margin expansion have never been greater, and our teams are energized by the organic growth opportunities ahead.”

“Our competitive advantage is widening as we realize a strong return on our investments in our teams and in pursuing the highest value organic growth opportunities,” said Lara Poloni, AECOM's president. “The three secular growth drivers of growing global investments in infrastructure, sustainability and resilience, and changing supply chains and assets are accelerating opportunities in our markets. Through our technical leadership, culture of collaboration and our expanded addressable market through our program management and advisory practices, we are well positioned to outperform. Our teams are committed to our purpose of delivering a better world, which is reflected in our number one ranking in our industry on *Fortune's* World's Most Admired Company list for the third consecutive year.”

“We continued to set new records this quarter while delivering on our financial targets, including accelerating top line growth and expanded profitability, and driving further shareholder value,” said Gaurav Kapoor, AECOM's chief financial officer. “We remain committed to our returns-focused capital allocation policy, led by investments in organic growth, share repurchases and our quarterly dividend program, which we recently increased by 20%. Our balance sheet and cash flow remain strong, which allows us to execute with certainty.”

## Business Segments

Americas

# CIMdata PLM Industry Summary

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Revenue in the first quarter was \$2.6 billion. Net service revenue<sup>2</sup> was \$924 million and included a 6% increase in the design business.

Operating income increased by 7% over the prior year to \$164 million. On an adjusted<sup>1</sup> basis, operating income increased by 7% to \$168 million. The adjusted operating margin on an NSR<sup>2</sup> basis of 18.2% reflected a 50 basis point increase over the prior year and continues to include accelerating investments in organic growth opportunities to capitalize on a record pipeline of pursuits.

## International

Revenue in the first quarter was \$803 million. Net service revenue<sup>2</sup> was \$669 million, a 12% increase from the prior year, which included growth across all key regions.

Operating income increased by 4% over the prior year to \$55 million. On an adjusted basis<sup>1</sup>, operating income increased by 4% to \$55 million. The adjusted operating margin on an NSR<sup>2</sup> basis increased by 10 basis points over the prior year to 8.3% as the Company continues to make strong progress on its goal of achieving a double-digit margin in the International segment.

## Conference Call

AECOM is hosting a conference call tomorrow at 12 p.m. Eastern Time, during which management will make a brief presentation focusing on the Company's results, strategy and operating trends. Interested parties can listen to the conference call and view accompanying slides via webcast at <https://investors.aecom.com>. The webcast will be available for replay following the call.

<sup>1</sup> Excludes the impact of certain items, such as restructuring costs, amortization of intangible assets and other items. See Regulation G Information for a reconciliation of non-GAAP measures to the comparable GAAP measures.

<sup>2</sup> Revenue, less pass-through revenue; growth rates are presented on a constant-currency basis.

<sup>3</sup> Reflects segment operating performance, excluding AECOM Capital and G&A.

<sup>4</sup> Net income before interest expense, tax expense, depreciation and amortization.

<sup>5</sup> Free cash flow is defined as cash flow from operations less capital expenditures, net of proceeds from disposals of property and equipment.

<sup>6</sup> Book-to-burn ratio is defined as the dollar amount of wins divided by revenue recognized during the period, including revenue related to work performed in unconsolidated joint ventures.

<sup>7</sup> On a constant-currency basis.

<sup>8</sup> Return on invested capital, or ROIC, reflects continuing operations and is calculated as the sum of adjusted net income as presented in the Company's Regulation G Information and adjusted interest expense, net of interest income, divided by average quarterly invested capital as defined as the sum of attributable shareholder's equity and total debt, less cash and cash equivalents.

<sup>9</sup> Net leverage is comprised of EBITDA as defined in the Company's credit agreement dated October 17, 2014, as amended, and total debt on the Company's financial statements, net of total cash and cash equivalents.

<sup>10</sup> Inclusive of non-controlling interest deduction and adjusted for financing charges in interest expense, the amortization of intangible assets and is based on continuing operations.

## ***Altair Announces Date of Fourth Quarter and Full Year 2022 Financial Results Conference Call***

9 February 2023

Altair, a global leader in computational science and artificial intelligence, will release its financial results for the fourth quarter and fiscal year ended December 31, 2022, after the market close

## CIMdata PLM Industry Summary

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on Thursday, February 23, 2023. On that day, management will hold a conference call and webcast at 5 p.m. ET to review and discuss the Company's fourth quarter and full year 2022 results and 2023 outlook. A recorded version of this webcast will be available after the call and accessible at <http://investor.altair.com>.

<b>What:</b>	Altair's Fourth Quarter and Full Year 2022 Financial Results Conference Call
<b>When:</b>	Thursday, February 23, 2023
<b>Time:</b>	5 p.m. ET
<b>Webcast:</b>	<a href="http://investor.altair.com">http://investor.altair.com</a> (live and replay)

### ***Bechtle delivers strong 2022***

7 February 2023

Bechtle AG has published its preliminary figures for the 2022 fiscal year, exhibiting strong growth with an increase in business volume to €7.28bn, or over 16%. Revenue recorded a largely organic increase of more than 13%, and for the first time surpassed the €6bn mark. Earnings before taxes (EBT) gained more than 9% reaching approximately €350m, which translates to an expected EBT margin of 5.8% (previous year: 6.0%). On 31 December 2022, Bechtle's workforce counted 14,046 employees, or 1,166 more than in the previous year (12,880).

Performance was exceptionally good in Q4 2022. With a business volume of €2.18bn, the year's final quarter was the best quarter yet in Bechtle's 40-year history. Recording an over 20% jump, business volume thus kept up the fast pace of the previous quarter. Revenue increased by some 18%, while EBT in the fourth quarter was up 10% with an EBT margin of 5.7%. A surge in incoming orders over the course of the quarter led to an order backlog of around €1.6bn, which is on par with the high level recorded on 30 September 2022.

The fourth quarter also saw Bechtle turn the page on operating cash flow, which will be positive for the year overall. Among other things, it was the successive decrease of stock levels that helped bring about this welcome development.

"The extremely difficult economic backdrop in particular makes our numbers for 2022 an exceptional success. Once again, the great resilience of our business model came to the fore. Still, we are above all talking about a fantastic team effort of our international Bechtle family," says Dr Thomas Olemotz, CEO, Bechtle AG.

Bechtle AG will publish its final, audited results for the 2022 fiscal year on Friday, 17 March 2023.

### ***FARO to Announce Financial Results for the Fourth Quarter and Year End 2022 on February 15, 2023***

7 February 2023

FARO® Technologies, Inc. announced that after market close on Wednesday, February 15, 2023, it will release its financial results for the fourth quarter and full year ended December 31, 2022. In conjunction with the release, Michael D. Burger, President and Chief Executive Officer, and Allen Muhich, Chief Financial Officer, will host a conference call on Wednesday, February 15, 2023 at 5:00 p.m. ET.

Interested parties can access the conference call by dialing 800-245-3047 (U.S.) or +1 203-518-9765 (International) and using the passcode FARO. **To avoid a delay in connecting to the call, please dial**

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**in 10 minutes prior to the start time.** A live webcast will be available in the Investor Relations section of FARO's website at: <https://www.faro.com/about-faro/investor-relations/events>

A replay of the webcast will be available in the Investor Relations section of the company's web site approximately two hours after the conclusion of the call and remain available for approximately 30 calendar days.

## ***Informatica Reports Fourth Quarter and Full-Year 2022 Financial Results***

8 February 2023

Informatica, an enterprise cloud data management leader, announced financial results for its fourth quarter and full-year 2022, ended December 31, 2022.

“Our solid fourth-quarter performance capped a year in which we delivered cloud ARR and subscription ARR above expectations. We achieved new annual milestones that surpassed \$1.5 billion in total ARR and total revenues and \$450 million in cloud ARR. Our performance demonstrates the durability of our business model and our diligent execution to deliver balanced growth and profitability,” said Amit Walia, Chief Executive Officer at Informatica. “Looking ahead, we are focusing on a cloud-only, consumption-driven strategy that is part of a multi-year plan driving new cloud business. With this strategy, we expect to streamline operational efforts as we aim to significantly improve operating leverage in 2023 and beyond.”

### **Fourth Quarter 2022 Financial Highlights:**

- GAAP Total Revenues decreased 2% year-over-year to \$398.8 million. Fourth quarter total revenues included a negative impact of approximately \$15.8 million from foreign currency exchange rates ("FX") year-over-year.
- GAAP Subscription Revenues increased 4% year-over-year to \$238.4 million.
- GAAP Operating Income of \$28.9 million and Non-GAAP Operating Income of \$113.7 million.
- GAAP Operating Cash Flow of \$60.7 million.
- Unlevered Free Cash Flow (after-tax) of \$91.5 million.

### **Full-Year 2022 Financial Highlights:**

- GAAP Total Revenues increased 4% year-over-year to \$1.5 billion. Full-year total revenues included a negative impact of approximately \$48.1 million from FX year-over-year.
- GAAP Subscription Revenues increased 15% year-over-year to \$857.2 million.
- Total ARR increased 12% year-over-year to \$1.52 billion. Full-year total ARR included a negative impact of approximately \$20.1 million from FX year-over-year.
- GAAP Operating Income of \$25.6 million and Non-GAAP Operating Income of \$350.6 million.
- GAAP Operating Cash Flow of \$200.1 million.
- Unlevered Free Cash Flow (after-tax) of \$288.5 million.

A reconciliation of GAAP to non-GAAP financial measures has been provided in the tables included in this press release. An explanation of these measures is also included below under the heading “Non-GAAP Financial Measures.”

### **Fourth Quarter 2022 Business Highlights:**

- Achieved a subscription net retention rate of 111% at the end of December 31, 2022.

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- Processed 53.0 trillion cloud transactions per month for the quarter ended December 31, 2022, as compared to 27.8 trillion cloud transactions per month in the same quarter last year, an increase of 91% year-over-year.
- Reported 206 customers that spend more than \$1 million in subscription ARR at the end of December 31, 2022, an increase of 35% year-over-year.
- Reported 1,916 customers that spend more than \$100,000 in subscription ARR at the end of December 31, 2022, an increase of 15% year-over-year.

## **Product Innovation:**

- Launched Informatica Data Management Cloud (IDMC) for State and Local Governments vertical to further enable governmental departments to modernize their data infrastructure with an AI-powered, secure, and scalable solution to make data-led decisions.
- Expanded Software-as-a-Service (SaaS) version of multidomain Master Data Management (MDM) to Asia with Microsoft Azure, serving broader Asia Pacific and Japan markets as customer demand for multitenant cloud MDM solution increases.
- Launched Informatica Data Loader for Amazon Redshift enabling customers with the ability to ingest data from AWS and third-party applications to load and combine data in their data warehouse.
- Launched Informatica Data Marketplace support for AWS Data Exchange offering customers a self-service data marketplace.
- Launched INFACore support for Amazon SageMaker Studio to simplify the development and management of data pipelines for building and deploying machine learning models.

## **Industry Recognition:**

- Recognized as a Leader in the 2022 Gartner® Magic Quadrant™ for Data Quality Solutions report. This makes 15 consecutive times of being a Leader, and Informatica is once again positioned highest on the ability to execute axis.
- Scored highest in three data quality use cases in the 2022 Gartner® Critical Capabilities for Data Quality Solutions report.
- Received “Strong” rating by Gartner in Product/Services and Support/Account Management in 2022 Gartner® Vendor Rating report.
- Recognized as Design Partner of the Year and Data & Analytics Partner of the Year at AWS re:Invent 2022.
- Named among 2023 Best Places to Work in IT by Computerworld.
- Named a Winner at the 2022 Digital Innovator Award from industry analyst Intellyx.
- Named a Champion in Bloor Research 2022 Sensitive Data Market Update report.
- Named a Leader in the GigaOm Radar for Data Catalogs report.

## **Leadership Update:**

- Appointed Michael McLaughlin as Chief Financial Officer. Mr. McLaughlin is a seasoned finance executive with 30 years of experience in the finance and technology industries.

## **First Quarter and Full-Year 2023 Financial Outlook**

The Company provides the financial guidance below based on current market conditions and

# CIMdata PLM Industry Summary

expectations and is subject to various important cautionary factors described below. Guidance includes the impact from macroeconomic conditions and foreign exchange headwinds. Based on information available as of February 8, 2023, guidance for the first quarter 2023 and full-year 2023 is as follows:

## First Quarter 2023 Ending March 31, 2023:

- GAAP Total Revenues are expected to be in the range of \$352 million to \$362 million, representing approximately a 1% year-over-year decrease at the midpoint of the range.
- Subscription ARR is expected to be in the range of \$1,005 million to \$1,015 million, representing approximately 19% year-over-year growth at the midpoint of the range.
- Cloud ARR is expected to be in the range of \$462 million to \$468 million, representing approximately 35% year-over-year growth at the midpoint of the range.
- Non-GAAP Operating Income is expected to be in the range of \$74 million to \$84 million, representing approximately a 5% year-over-year decrease at the midpoint of the range.

## Full-Year 2023 Ending December 31, 2023:

- GAAP Total Revenues are expected to be in the range of \$1,570 million to \$1,590 million, representing approximately 5% year-over-year growth at the midpoint of the range.
- Total ARR is expected to be in the range of \$1,585 million to \$1,615 million, representing approximately 5% year-over-year growth at the midpoint of the range.
- Subscription ARR is expected to be in the range of \$1,098 million to \$1,118 million, representing approximately 11% year-over-year growth at the midpoint of the range.
- Cloud ARR is expected to be in the range of \$604 million to \$614 million, representing approximately 35% year-over-year growth at the midpoint of the range.
- Non-GAAP Operating Income is expected to be in the range of \$400 million to \$420 million, representing approximately 17% year-over-year growth at the midpoint of the range.
- Unlevered Free Cash Flow (after-tax) is expected to be in the range of \$340 million to \$360 million, representing approximately 21% year-over-year growth at the midpoint of the range.

The Company is assuming constant FX rates for the year based on the rates at the start of the planning period. For reference purposes, the assumed FX rates for our top four currencies in full-year 2023 are as follows:

### Currency Planned Rate

EUR/\$ 1.07

GBP/\$ 1.20

\$/CAD 1.35

\$/JPY 132

Using the foreign exchange rate assumptions noted above, the Company has incorporated the following FX impact into 2023 guidance:

	Q1 2023	Full-Year 2023
Total Revenues	~\$7m negative impact y/y	~\$1m negative impact y/y
Total ARR	~\$5m negative impact y/y	~\$11m negative impact y/y

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Subscription ARR~\$2m negative impact y/y~\$8m negative impact y/y

Cloud ARR — ~\$3m negative impact y/y

In addition to the above guidance, the Company is also providing a first quarter and full-year 2023 weighted-average number of basic and diluted share estimates for modeling purposes. For the first quarter 2023, we expect basic weighted-average shares outstanding to be approximately 285 million shares and diluted weighted-average shares outstanding to be approximately 288 million shares. For the full-year 2023, we expect basic weighted-average shares outstanding to be approximately 289 million shares and diluted weighted-average shares outstanding to be approximately 298 million shares.

Reconciliation of non-GAAP operating income and unlevered free cash flow after-tax guidance to the most directly comparable GAAP measures is not available without unreasonable effort, as certain items cannot be reasonably predicted because of their high variability, complexity, and low visibility. In particular, the measures and effects of our stock-based compensation expense specific to our equity compensation awards and employer payroll tax-related items on employee stock transactions are directly impacted by the timing of employee stock transactions and unpredictable fluctuations in our stock price, which we expect to have a significant impact on our future GAAP financial results.

## Webcast and Conference Call

A conference call to discuss Informatica's fourth quarter and full-year 2022 financial results and financial outlook for the first quarter and full-year 2023 is scheduled for 1:30 p.m. Pacific Time today. To participate, please dial 1-844-200-6205 from the U.S. or 1-646-904-5544 from international locations. The conference passcode is 830565. A live webcast of the conference call will be available on the Investor Relations section of Informatica's website at [investors.informatica.com](http://investors.informatica.com) where presentation materials will also be posted prior to the conference call. A replay will be available online approximately two hours following the live call for a period of 30 days.

## ***LECTRA: 2022: strong increase in revenues and earnings***

8 February 2023

Lectra's Board of Directors, chaired by Daniel Harari, reviewed the consolidated financial statements for the fiscal year 2022. Audit procedures have been performed by the Statutory Auditors. The certification report will be issued at the end of the Board of Director's meeting of February 23, 2023.

To facilitate the analysis of the Group's results, the financial statements are compared to those published in 2021 and to the 2021 pro forma financial statement ("2021 Pro forma"), prepared by integrating the three acquisitions made in 2021 – Gerber Technology ("Gerber"), Neteven, and Gemini CAD Systems ("Gemini") – as if they had been consolidated from January 1, 2021, whereas they have been consolidated since June 1, July 28 and September 27, 2021 respectively.

### **1. GREAT RESILIENCY IN A DEGRADED ENVIRONMENT**

2022 was significantly marked by the war in Ukraine and its consequences. As soon as the conflict began, the Company decided to cease its operations in Russia, by suspending the activity of its subsidiary Lectra Russia and stopping all deliveries of products or services. The Group's direct exposure to Ukraine and Russia is low; the contribution of these two countries in 2021 accounted for less than 1 percent of revenues.

This war has accelerated price increases, energy shortfalls and shortages in some raw materials. However, their impact on the Group's financial statements was limited due to its low exposure to energy costs and a limited dependency on those raw materials affected the most.

# CIMdata PLM Industry Summary

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The Group also adjusted sale prices to compensate for the increase in its production costs in January and in July.

In addition, the COVID-19 epidemic in China, involving very strict lockdowns and then, following the change in strategy, a surge in contaminations late in the year, had a negative impact on business in Asia, and particularly in China.

The climate of uncertainty since the year began was intensified during the second half of the year by growing fears of recession in many countries.

These situations have led some of the Group's customers to reduce their investment budgets to cope with cost increases, shortages, or potential reductions in activity, while others have postponed purchasing decisions until their business environment and visibility improve.

Finally, since the beginning of 2022, the dollar has significantly strengthened against the euro. With a yearly average exchange rate of \$1.05/€1, the dollar was up 12% compared to 2021. This change and other currency changes mechanically increased revenues by roughly 7%.

In this environment, the Group has once again demonstrated its resiliency, with strong earnings growth.

## 2. Q4 2022

In Q4 2021, the Gerber, Neteven and Gemini accounts were consolidated for the entire period. As a result, the published figures and the 2021 Pro forma figures were identical.

In a particularly difficult macroeconomic environment, orders for perpetual software licenses, equipment and accompanying software, and non-recurring services (48.7 million euros) decreased by 13% compared to Q4 2021. This decline is attributable to the decrease recorded in Asia-Pacific, particularly in China owing to the impact of COVID-19, and in the countries of Northern and Eastern Europe, which, because of their geographical situation, are more exposed to the economic and social consequences of the war in Ukraine.

At the same time, orders for new software subscriptions (equivalent to 3.4 million euros in annual revenues) increased by 68%, again confirming the success and excellent adoption of these products.

Q4 2022 revenues (129.9 million euros) increased by 3%. EBITDA before non-recurring items (23.5 million euros) increased by 8% and the EBITDA margin before non-recurring items was 18.1% (+0.8 percentage points).

Net income (8.4 million euros) was down 26% compared to Q4 2021.

Free cash flow before non-recurring items came to 12.1 million euros (13.9 million euros in Q4 2021).

## 3. 2022

### Acquisition of the majority of the capital of TextileGenesis

On December 8, 2022, Lectra announced the signature of an agreement to acquire the majority of the capital and voting rights of the Dutch company TextileGenesis (see press release issued on that date).

The transaction was finalized on January 9, 2023.

### Revenues and earnings in line with published objectives

2022 revenues (521.9 million euros) and EBITDA before non-recurring items (98.4 million euros) were in the range of the objectives published in February 2022, as fine-tuned in July and confirmed in October.

Revenues increased by 35% and EBITDA before non-recurring items by 51% compared to the financial statements published in 2021. The EBITDA margin before non-recurring items was 18.8%.

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Income from operations before non-recurring items (68.5 million euros) was up 54%. This includes an 11.8-million-euro charge for amortization of intangible assets arising from the acquisitions of Gerber, Neteven, Gemini, and of the activity of Glengo Teknoloji. After recognizing a non-recurring charge of 4.0 million euros in 2022, income from operations amounted to 64.5 million euros.

Net income (43.8 million euros) was up 55%.

Free cash flow before non-recurring items (43.7 million euros) was down slightly compared to 2021 due to a temporary increase in working capital requirement.

## **Comparison to the 2021 Pro forma**

In 2022 orders for perpetual software licenses, equipment and accompanying software, and non-recurring services (202.5 million euros) were stable compared to the amount of 2021 Pro forma orders. The annual value of new software subscription orders (9.6 million euros) was up 34%, illustrating the success of the SaaS offers for Industry 4.0.

Despite the negative impact of the war in Ukraine and the COVID-19 epidemic in China, revenues (521.9 million euros) increased by 12% compared to the 2021 Pro forma. Revenues from perpetual software licenses, equipment and accompanying software, and non-recurring services (208.8 million euros) increased by 10%, those from recurring contracts (168.4 million euros) by 13% and those from consumables and parts (144.7 million euros) by 12%.

EBITDA before non-recurring items increased by 35% and the EBITDA margin before non-recurring items by 3.2 percentage points.

## **Balance sheet at December 31, 2022**

At December 31, 2022, the Group had a particularly robust balance sheet with a consolidated shareholders' equity of 452.2 million euros (400.8 million euros at December 31, 2021) and a positive net cash position of 11.4 million euros, less than two years after the acquisition of Gerber. The working capital requirement was a negative 6.3 million euros.

## **4. DIVIDEND INCREASED TO €0.48 PER SHARE**

The Board of Directors will propose to the Shareholders' Meeting of April 28, 2023, the payment of a dividend at €0.48 per share in respect of fiscal year 2022.

## **5. OUTLOOK**

### **A new strategic roadmap for 2023-2025**

Launched in 2017, the Lectra 4.0 strategy aims to position the Lectra as a key Industry 4.0 player in its three strategic market sectors, fashion, automotive and furniture, before 2030. The strategy has been implemented up to now through two strategic roadmaps covering the periods 2017-2019, then 2020-2022.

Lectra will continue to implement the Lectra 4.0 strategy over the next three years through a new strategic roadmap for 2023-2025.

The Group intends to take full advantage of its change in dimension – mainly following the acquisition of Gerber in June 2021 – to accelerate growth, to significantly increase the volume of SaaS in its revenue, and to seize acquisition opportunities. With the commitment and engagement of employees, and recognition by customers, Lectra will be at the forefront in building a more sustainable future.

To achieve these objectives, the Group has set six strategic priorities for 2023-2025:

- reinforce implementation of ethical, social, societal and environmental best practices both

internally and for customers;

- leverage all synergies arising from the Gerber acquisition;
- accelerate the transition of software sales to the SaaS model;
- accelerate the transformation of the Group's customer relationship and customer engagement model;
- following on from the previous two roadmaps, continue to pursue external growth;
- prepare Lectra for the 2026-2030 period.

These six strategic priorities provide the Group with a structure for the work required to achieve the ambitions of its strategic roadmap. They are detailed in the financial report on the activity and the consolidated financial statements for the fourth quarter and fiscal year 2022.

## **Financial objectives**

Lectra's ambition is to achieve, in 2025, revenues of over 700 million euros (including 10% in SaaS revenues), combining both organic growth and acquisitions, and an EBITDA margin before non-recurring items of over 20%. These objectives were prepared on the basis of the closing exchange rates on December 30, 2022, in particular \$1.07 to the euro.

The Company intends to keep its attractive shareholder payment policy with dividends that over the roadmap period should represent a payout ratio of about 40% of net income, excluding non-recurring items.

Free cash flow generation will also contribute to financing the Group's internal development strategy and acquisitions, as well as the repayment of debt.

## **Outlook for 2023**

In its financial report on the third quarter and first nine months of the year, which included a review of the 2020-2022 roadmap, the Group confirmed that the progress made during the period, as well as the acquisitions of 2021, and the Gerber acquisition in particular, had given the Group a new dimension and increased opportunities for continued growth.

While this new status enables Lectra to look ahead with confidence at its development over the medium term, the year 2023 remains unpredictable given the degraded macroeconomic and geopolitical environment, as numerous uncertainties could continue to weigh upon the investment decisions of the Group's customers. Still, the lifting of restrictions in China that was announced at the end of 2022, and which resulted in the reopening of the country at the start of the year, is expected to have a positive impact in 2023.

In a challenging context, the Group invested in 2022 to prepare for execution of its strategic roadmap for 2023-2025. By proceeding with two general salary increases during the year, it also decided to protect employees against the impact of inflation, thereby strengthening their engagement and commitment to the Group.

Despite the persistent lack of visibility for 2023, Lectra, which has a particularly strong balance sheet and a proven business model featuring a very high percentage of recurring revenues, will continue to invest in order to prioritize medium-term growth.

Because of an exceptionally large order backlog at January 1, 2022 (4.3 million euros higher than the backlog at January 1, 2023), and the very high amount of orders booked in January 2022, before the start of the war in Ukraine, revenues for the first quarter of 2023 are expected to be slightly lower than for the first quarter of 2022. Combined with the increase in overhead costs, this decline is expected to also lead

to a decrease in EBIDTA before non-recurring items.

More generally, the contextual elements that affected the Group's activity and results in 2022 were reflected heterogeneously over each quarter, making quarterly comparisons between 2023 and 2022 less relevant.

Financial objectives for 2023

In light of the above, Lectra has set its objectives for 2023, with revenues in the range of 522 to 576 million euros (+2% to +12% at constant exchange rates relative to 2022) and EBITDA before non-recurring items in the range of 90 to 113 million euros (-5% to +20% at constant exchange rates relative to 2022).

*The Management Discussion and Analysis of Financial Conditions and Results of Operations and the financial statements for Q4 and the fiscal year 2022 are available on [lectra.com](http://lectra.com). First quarter earnings for 2023 will be published on April 27, 2023. The Annual Shareholders' Meeting will take place on April 28, 2023.*

## ***Stratasys Conference Call to Discuss Fourth Quarter and Full Year 2022 Financial Results***

6 February 2023

Stratasys Ltd. will release financial results for the fourth quarter and full year ended December 31, 2022 on Thursday, March 2, 2023. The Company plans to hold the conference call to discuss its fourth quarter and full year 2022 financial results on Thursday, March 2, 2023 at 8:30 a.m. (ET).

The investor conference call will be available via live webcast on the Stratasys Web site at [investors.stratasys.com](http://investors.stratasys.com); or directly at the following web address:

<https://event.choruscall.com/mediaframe/webcast.html?webcastid=K6UFH5he>

To participate by telephone, the U.S. toll-free number is 877-407-0619 and the international dial-in is +1-412-902-1012. Investors are advised to dial into the call at least ten minutes prior to the call to register. The webcast will be available for 6 months at [investors.stratasys.com](http://investors.stratasys.com), or by accessing the above-provided web address.

## ***Trimble Announces Fourth Quarter and Full Year 2022 Results and Initiates 2023 Guidance***

8 February 2023

Trimble Inc. announced fourth quarter and fiscal year 2022 financial results.

### **Fourth Quarter 2022 Financial Highlights**

- Revenue of \$856.5 million was down 8 percent year-over-year, and was flat year-over-year on an organic basis
- Annualized recurring revenue (ARR) was \$1.60 billion, up 14 percent year-over-year, up 16 percent on an organic basis
- GAAP operating income was \$96.7 million and non-GAAP operating income was \$187.8 million
- GAAP net income was \$85.6 million and non-GAAP net income was \$149.9 million
- Diluted earnings per share was \$0.34 on a GAAP basis, and \$0.60 on a non-GAAP basis

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- Adjusted EBITDA was \$208.4 million, 24.3 percent of revenue

## Executive Quote

"Trimble is a purpose-driven company, transforming and digitizing industries that support how we live, what we eat, and how we move," said Rob Painter, Trimble's president and chief executive officer. "Record revenue, annualized recurring revenue, and gross margins in 2022 demonstrate progression of our Connect and Scale strategy. We enter 2023 with resolve to continue executing our strategy while navigating macroeconomic uncertainties."

## Fiscal 2022 Financial Highlights

- Revenue of \$3,676.3 million was flat year-over-year, and was up 7 percent year-over-year on an organic basis
- GAAP operating income was \$510.9 million and non-GAAP operating income was \$841.5 million
- GAAP net income was \$449.7 million and non-GAAP net income was \$660.3 million
- Diluted earnings per share was \$1.80 on a GAAP basis, and \$2.64 on a non-GAAP basis
- Adjusted EBITDA was \$917.3 million, 25.0 percent of revenue
- During fiscal 2022, Trimble repurchased approximately 6.0 million shares for \$394.7 million.

## Forward Looking Guidance

For the full year 2023, Trimble expects to report revenue between \$3,700 million and \$3,800 million and GAAP earnings per share of \$1.59 to \$1.79, and non-GAAP earnings per share of \$2.66 to \$2.86. GAAP guidance assumes a tax rate of 19.5 percent and non-GAAP guidance assumes a tax rate of 18.0 percent. Both GAAP and non-GAAP earnings per share assume approximately 249 million shares outstanding. This guidance does not incorporate the expected financial impacts of the pending acquisition of Transporeon. A reconciliation of the non-GAAP measures to the most directly comparable GAAP measures and other information relating to these non-GAAP measures are included in the supplemental reconciliation schedule attached.

## Investor Conference Call / Webcast Details

Trimble will hold a conference call on February 8, 2023 at 8:00 a.m. ET to review its fourth quarter and full year 2022 results. An accompanying slide presentation will be made available on the "Investors" section of the Trimble website, [www.trimble.com](http://www.trimble.com), under the subheading "Events & Presentations." The call will be broadcast live on the web at <https://investor.trimble.com>. Investors without internet access may dial into the call at (888) 660-6347 (U.S.) or (929) 201-6594 (international). The passcode is 1043223. The replay will also be available on the web at the address above.

## *Velo3D Announces Preliminary, Unaudited Fourth Quarter and Fiscal Year 2022 Financial Results*

6 February 2023

[Velo3D, Inc.](http://www.velo3d.com) — a leading additive manufacturing technology company for mission-critical metal parts, announced preliminary, unaudited fourth quarter and fiscal year 2022 financial results.

Based on the information and data currently available, the company preliminarily estimates that:

- For the fourth quarter ended December 31, 2022, revenue will exceed the company's previous guidance and be in the range of \$29 million to \$30 million. Gross margin (the company's gross

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profit as a percentage of revenue) for the fourth quarter will be in line with the company's previous guidance and will be in the range of 5.0 percent to 6.0 percent.

- For fiscal year ended December 31, 2022, revenue will be in the range of \$80 million to \$81 million and gross margin will be in the range of 3.0 percent to 4.0 percent.
- The company will continue to incur an operating loss for the fourth quarter and fiscal year ended December 31, 2022.
- The company had approximately \$81 million in cash and investments as of December 31, 2022.

The company has not completed the preparation of its consolidated financial statements for the year ended December 31, 2022. The preliminary, unaudited results presented in this press release as of and for the fourth quarter and year ended December 31, 2022 are based on current expectations and are subject to adjustment, as the company completes the preparation of its 2022 year-end consolidated financial statements. These preliminary, unaudited results are not a comprehensive statement of the company's financial results for these periods and should not be viewed as a substitute for financial statements prepared in accordance with generally accepted accounting principles. Actual results may differ materially from those disclosed in this press release. The preliminary financial data included in this press release has been prepared by, and is the responsibility of, Velo3D, Inc.'s management. PricewaterhouseCoopers LLP has not audited, reviewed, examined, compiled, nor applied agreed-upon procedures with respect to the preliminary financial data. Accordingly, PricewaterhouseCoopers LLP does not express an opinion or any other form of assurance with respect thereto.

In addition, the company's assessment of the effectiveness of its internal control over financial reporting as of December 31, 2022 will not be completed until sometime in March 2023 and, accordingly, the company has not made any conclusions as to whether if any of the material weaknesses previously identified in the company's Annual Report on Form 10-K for the year ended December 31, 2021 have been remediated. In addition, the company will report an additional material weakness in its internal control over financial reporting related to its design and controls over the existence of inventory and the completeness and accuracy of cost of revenue.

The company will host a conference call for investors on Thursday, March 2, 2023 at 2:00 p.m. Pacific Time to discuss its full fiscal year 2022 financial results. The call will be webcast and can be accessed from the Events page of the Investor Relations section of Velo3D's website at <https://ir.velo3d.com/>. The information on the company's website, however, is not, and should not be deemed to be, a part of this press release.

## Implementation Investments

### ***CAPGEMINI COLLABORATES WITH THE UNIVERSITY OF CALIFORNIA, BERKELEY TO ACCELERATE TIME TO MARKET OF NEW MATERIALS***

2 February 2023

**Capgemini announced the launch of a research collaboration with The University of California, Berkeley, focused on building new methodologies and tools to discover material surface properties. Investigators seek to meet increasing needs for sustainable manufacturing and accelerate the time to market of new materials.**

Capgemini will work in collaboration with the university's ecosystem to develop innovative technologies, thought leadership, and assets, to help future proof engineering services. These joint

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efforts are designed to harness the power of technology and enhance capabilities in Intelligent Industry[1].

For this project, focused on ‘*Laser Processing for Accelerated Optical Materials Discovery*,’ Ramon Antelo, Chief Technology Officer for Manufacturing and Industrial Operations at Capgemini Engineering, along with other experts at Capgemini will join forces with a team of advanced researchers supervised by Professor Vassilia Zorba, Department of Mechanical Engineering at UC Berkeley. This collaboration will leverage the advances in AI, nanomaterials and laser technologies to create a set of methodologies, tools and labs that will reduce the time to market of new materials.

Among different advanced material fabrication technologies, ultrafast laser processing plays a central role in creating unique material properties, with cross-cutting applications such as energy harvesting, antibacterial and water-repellent surfaces, anti-corrosion, robust materials under extreme conditions, nuclear security missions, etc.

*“Removing human intuition and intervention from the materials discovery process has been a long-standing challenge in the goal of accelerating the rate at which novel materials are found,”* said Vassilia Zorba, Professor Department of Mechanical Engineering at UC Berkeley. *“Emerging capabilities such as state-of-the-art ultrafast laser technologies, automation, and the advent of machine learning are now bringing us a step closer to this goal. We are very excited to work with Capgemini and use these capabilities to screen thousands of materials and surface topologies in a high-throughput rate, in order to develop materials that lend themselves to cross-cutting energy applications.”* *“Accelerating the use of sustainable manufacturing is crucial to help meet sustainability goals. Improving the performance of material is one of the key elements for this to happen,”* stated William Rozé, CEO of Capgemini Engineering and Group Executive Board Member. *“We are extremely proud to launch a new collaboration program with UC Berkeley to tackle this important challenge within Intelligent Industry. Innovation is at the core of our DNA, and this new program will further nurture our research program strategy.”*

*“Accelerating the use of sustainable manufacturing is crucial to help meet sustainability goals. Improving the performance of material is one of the key elements for this to happen,”* stated William Rozé, CEO of Capgemini Engineering and Group Executive Board Member. *“We are extremely proud to launch a new collaboration program with UC Berkeley to tackle this important challenge within Intelligent Industry. Innovation is at the core of our DNA, and this new program will further nurture our research program strategy.”*

[1] ‘Intelligent Industry’ is the new era of digital transformation: characterized by a growing convergence of the physical and virtual worlds – product, software, data, and services – across all industries; and fueled by the rapid development of technologies, including cloud, artificial intelligence (AI), internet of things (IoT), edge computing and 5G.

## ***Chaser Brand Selects Centric PLM to Handle Data and Drive Efficiency***

7 February 2023

Centric Software® is delighted to announce the release of a success story about its customer, Chaser Brand.

Headquartered in California, Chaser Brand was founded in 1998. Chaser is a contemporary clothing line with rock and roll influences for women, men and children. It is also the parent company to two other brands: Saltwater Luxe and Sandrine Rose, all available DTC via the respective websites and shipping internationally to certain countries. The majority of the business is wholesale, with product sold

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throughout the US in various retail stores and boutiques.

Too many spreadsheets and a false start with a PLM system that didn't meet the company's requirements had Chaser re-evaluating their options. Learning more about Centric's small-to-medium business web-based PLM option that grows with a company, convinced Chaser to implement Centric PLM®.

One year into it, spreadsheets have been eliminated and all spec changes are captured in Centric PLM, a single source of the truth. Internal and external permissions and accesses are in place that reflect the way they want their business aligned. Hadi Salem, Founder of Chaser says, "We want to reduce is the amount of bad information that's going to the factory or vice versa... Centric PLM is a single point of entry and a single point of exit. Information is in one spot and one spot only."

Read about the path Chaser took to get to this state, what important lessons they learned along the way and what they consider to be Centric's greatest asset!

## ***DXC Technology Supports ContiTech with Modernization of Business Applications***

2 February 2023

DXC Technology will support ContiTech, one of Continental Group's three sectors, to digitally transform its global IT applications. Through the recently signed six-year deal, DXC will deliver transformational SAP S/4HANA services to build the digital backbone for ContiTech's mission-critical business systems covering 172 locations in 40 countries across the globe.

ContiTech develops, manufactures and markets environmentally friendly, multi-material, smart industrial and service solutions that make mining, railway engineering, automotive and other important industries safer and more convenient.

ContiTech today runs its operations on more than a dozen different legacy SAP systems. Through the agreement, DXC will draw on its global SAP expertise and industry knowhow, to enable ContiTech to implement a single, integrated SAP S/4HANA platform for its global business. As a result, ContiTech will transform processes across manufacturing, supply chain, logistics, finance and procurement, while generating companywide data insight. ContiTech will benefit from new levels of process standardization and optimization, helping to manage increasing complexity while driving down costs.

"We turned to DXC to provide a strong, reliable IT platform for the next chapter of our business growth," said Matthias Reinsberg, Executive Vice President and Chief Financial Officer at ContiTech. "With 40,000 employees in about 40 countries globally, it's essential for us to have rapid access to real-time data to enable informed decision-making and enhance collaboration between colleagues."

"With our expertise in simplifying and modernizing mission-critical business applications, we are helping customers respond quickly to market dynamics, simplify operations, and minimize risk," said Karim Jeribi, Vice President Sales EMEA at DXC Technology.

"We are delighted to be supporting ContiTech in one of the largest IT transformation projects in its history which will help strengthen its position in the market," added Jacqueline Fechner, General Manager, DXC Central, Northern & Eastern Europe.

## ***EG Industries Increases Program Capacity with Actify Automotive Program Management Suite***

6 February 2023

Actify, the leading provider of visualization and program management solutions for the automotive supply chain, announced that EG Industries, a Tier 1 supplier to the automotive industry, has achieved significant program management improvements from early adoption of the Actify APM Suite, the industry's only purpose-built automotive program management software that enhances communication, collaboration, and comprehension across all teams working on automotive programs.

“We work with our automotive customers to design, develop, and manufacture a wide range of components and sub-assemblies – everything from external parts like wheel trims, to under-hood parts like engine undercovers,” explained Terry English, Director of Program Management at EG Industries. “Some of our customers have a petrol version of their vehicle, a hybrid version, and an electric version, which means that for any one platform, we might have three different versions of a component to create instead of just one. That really compounds the amount of work that a program manager must do.”

As with other auto suppliers, the automotive industry's move towards electrification has drastically increased the number of automotive programs that EG Industries needs to manage. The company found that “throwing bodies at the problem” was not a viable approach to this expanding workload since it came with its own set of challenges. To bring added scalability to its automotive program management activities, EG Industries tried out several different software tools, with varying degrees of success.

“We tried doing program management using an Excel-based format for a while, but it just didn't work very well,” said English. “After that, we tried an ERP-based software solution, but it was quite cumbersome. Our team members found it very difficult and time-consuming to navigate the product and update all the different fields and forms. As a result, the system was often missing the latest status updates, which hampered accurate visibility into where a program actually stood. We knew there had to be a better way.”

The Actify APM (Automotive Program Management) Suite was an ideal solution for EG Industries as it was designed in partnership with leading suppliers, specifically for automotive program management. Actify APM equips program teams with enterprise-class cloud technology to streamline day-to-day operations across the program lifecycle. The solution also pulls together the information needed to effectively manage the end-to-end program lifecycle and is flexible and customizable – allowing customers to work the way that suits them best.

“Actify's system has simplified things quite a bit for us,” said English. “For example, we're able to use forms with radio boxes or check boxes, so it's very quick and easy for the team members to go into the system, check off whatever they have to check off, and update the program status. If they have to upload a file, it's just drag and drop. And as far as the training goes, it's been pretty painless. I'm the person in charge of training everybody at all of our plants on the new system, and I think the longest any of those trainings took was about 20 minutes. The product is that easy to use.”

In addition to the functionality of the Actify platform, EG Industries also appreciates the spirit of partnership displayed by Actify as a company.

“Any suggestions that we're giving to Actify are being implemented pretty quickly,” said English. “It shows that they're listening to their customers.”

Since going live with Actify, EG Industries has seen 100% adoption of the new system among its program managers and much better upkeep around program status – which ultimately helps not just the

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program managers, but the customers as well. EG Industries' previous ERP-based system and the Excel-based system didn't give a clear picture program status was. Now, with Actify, there's an up-to-date dashboard any program manager can look at to immediately see if a program is starting to slip – and if it is, they can see exactly *where* it's slipping, and identify *why* it's slipping. That centralized view of information helps immediately clarify where any issues might be. If there's a problem, it can be identified very quickly and allow program managers to get to the root source of it.

“Actify saves EG Industries' program teams time every day, and that's important for a lot of reasons, not least of which is that program managers are very hard to find,” added English. “If you hope to retain people, you've got to give them tools that make their lives easier. With Actify, we're getting more throughput, and we're getting program management tasks done in a timely manner, which ultimately is going to help our plants launch programs on time and on budget. Without a question, Actify has been worth it.”

“We have an ambitious vision to transform program management,” said Dave Opsahl, CEO, Actify. “We are beyond thrilled to see how quickly Terry and his team have experienced significant productivity gains from using Actify APM. It validates the invisible problem in the automotive supply chain that has gone unaddressed for far too long. In order for suppliers to survive and thrive through the onslaught of EV programs over the next decade, they will need tools to help them manage and increase program capacity, and Actify APM is that tool.”

## ***HAVI Leverages Advanced Warehouse Operations Capabilities and Efficiencies with the Infor Cloud***

2 February 2023

Infor®, the industry cloud company, announced that HAVI Group has deployed Infor WMS warehouse management system in the cloud. HAVI is a global company that innovates, optimizes and manages the supply chains of leading food service brands.

HAVI plans to implement Infor WMS at more than 50 of its distribution centers across Europe and Japan by the end of 2026. The solution will contribute to continuous improvements in HAVI's service, efficiency and operational resilience from these locations.

Following an extensive year-long search, HAVI selected Infor WMS after recognizing the strengths of its cutting-edge technology architecture. This ensures, at all times, the highest IT security standards, round-the-clock service availability, optimal operational efficiency, and the safety and traceability of food across the supply chain. HAVI also looks forward to leveraging the solution's advanced warehouse operations management and resource planning capabilities, which include 3D visualization and a more data-driven approach to execution.

HAVI found the perfect partner in Infor because the multi-tenant cloud, powered by AWS (Amazon Web Services), provides all updates on a monthly basis, ensuring that Infor WMS is always up to date. The warehouse management solution provides visual monitoring and control of order processes. Resource capacities and shortages can be viewed in real time, enabling resource allocation to be accelerated as needed. In addition, workforce planning and management is integrated with Infor WMS. This allows for more effective and efficient management of service requirements, so the software can be used to holistically manage and account for all distribution center activities.

"Infor WMS offers many features that allow us to respond to our customers' evolving needs, with increased standardization and more advanced planning and execution. We also see opportunities to increase our operational performance by adopting new technologies and automation, as these can

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contribute to an even safer workplace while elevating the employee experience," says Rafael Gomez, HAVI SVP, supply chain operations and freight management.

"In view of the current economic crisis, the essential importance of supply chains for the global economy is becoming apparent. For this reason, we are pleased to welcome HAVI as our customer," said Wolfgang Kobek, Infor EVP & general manager for international. "We are aware of the trust placed in us — especially with regard to IT security — and are proud to meet the demands of constantly evolving supply chains of today and tomorrow with our software."

## ***Jacuzzi Chooses Infor CloudSuite as Centerpiece of Enterprise Transformation***

2 February 2023

Infor®, the industry cloud company, announced Jacuzzi Brands Inc. has selected Infor CloudSuite Industrial Enterprise to help improve inventory accuracy and supply chain efficiency, enhance customer experience and standardize business processes.

"This was a tremendous opportunity for us to showcase our commitment to partnership, industry expertise and our incredibly talented teams," said Infor EVP and General Manager Ed Allen. "Jacuzzi has been growing and realized it could no longer meet its business goals by following the current path. Multiple solutions at different facilities resulted in a system that was disconnected and unintegrated. It was important to Jacuzzi to get cross-functional business capabilities on the same platform, unifying the enterprise through one consistent set of solutions and technology. We have developed strong relationships with an innovative industry leader and great customer, and their future is bright with Infor."

Founded in 1956, Jacuzzi Brands is the clear European spa market leader and is the co-leader in the U.S. sector. Jacuzzi Brands is a global manufacturer of premium spas, swim spas, whirlpools, soaker and walk-in bathtubs and related bathroom products and accessories. Its brands include Jacuzzi®, Sundance®, Dimension One Spas®, Hydromax®, ThermoSpas® and BathWraps®. The company's flagship brand, Jacuzzi®, is the most recognized in the world for spa and hydrotherapy bathing.

An Infor customer since 1985, Jacuzzi had been running Infor ERP on-premises in many worldwide facilities. In 2019, Jacuzzi management realized that the current situation would not support the company's growth. Specifically, Jacuzzi wanted to better manage its inventory and reduce inventory levels. It also hoped to improve supply chain effectiveness and raise the customer experience. After a review involving multiple vendors, the company chose Infor CloudSuite Industrial Enterprise.

"We were convinced that we would not be able to reach our business goals and profitability objectives using our legacy platforms," said Brian Pierson, Jacuzzi Brands global chief operating officer. "One of Infor's advantages is that they are easy to do business with. They brought together the right people at the right time and were able to show us that they had the right solution for our organization. We know they have got our backs throughout this journey."

## ***Merck KGaA, Darmstadt, Germany Further Drives Its Digitalization – Joint Innovation with SAP***

8 February 2023

SAP SE announced a strategic partnership with Merck KGaA, Darmstadt, Germany, a leading science and technology company, to jointly drive sustainable business practice innovation. The partnership will further accelerate the migration of the systems of Merck KGaA, Darmstadt, Germany to the cloud with RISE with SAP, a core element of which is SAP S/4HANA Cloud.

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The pace of digitalization is accelerating. Disruptions in recent months have shown that to be successful, companies need to respond quickly to changes by adapting their business models and processes. For this reason, Merck KGaA, Darmstadt, Germany and SAP SE announced a new strategic partnership. The aim is to further accelerate the digital transformation of Merck KGaA, Darmstadt, Germany drive sustainable innovation together, and comply with security as well as compliance standards.

“Our partnership with SAP is set to help us accelerate our innovation journey and bring us to the next level of digitalization. We are continuing to integrate the very best data and digital technologies into the heart of our organization, ultimately helping us to better serve our customers and patients,” said Belén Garijo, Chair of the Executive Board and CEO of Merck KGaA, Darmstadt, Germany.

The first step of the collaboration is cloud transformation of Merck KGaA, Darmstadt, Germany. The leading science and technology company will use RISE with SAP for this purpose. At the core of RISE with SAP is SAP S/4HANA Cloud, which will help digitalize the company’s business processes and make them more efficient, agile and adaptable. The cloud infrastructure management is provided by the hyperscaler AWS.

The access to the SAP Business Network that comes with RISE with SAP will enable Merck,KGaA, Darmstadt, Germany to connect with partners within its supply chains and thus optimize business processes across companies.

“We’re excited to bring together the passion and innovative power of our two leading companies to drive the cloud transformation of Merck KGaA, Darmstadt, Germany,” said Christian Klein, CEO and Member of the Executive Board of SAP SE. “Together, we will build on this partnership to enable a more circular and sustainable world through new industry practices and processes.”

## ***MGO Global Chooses CGS BlueCherry® for End-to-End Supply Chain, Warehousing and Logistics Management***

6 February 2023

CGS, a global provider of business applications, enterprise learning and outsourcing services, announced that **MGO Global Inc.**, a performance-driven lifestyle brand portfolio company, has chosen its award-winning and industry-leading BlueCherry® Enterprise Suite for its end-to-end ERP and warehousing/logistics management. MGO will rely on CGS’s innovation and expertise to streamline its operation and provide insights to help its business grow.

The demands placed on today’s fashion and apparel industry pose major challenges for the manufacturers and retailers responsible for creating, sourcing, and delivering products. Brands like MGO are tasked with delivering the highest quality goods to its customers, wherever they are, which is why transparency in its supply chain is a key to success. BlueCherry’s technology platform will propagate deep into MGO’s supply chain logistics to digitize, collect, and validate important insights for MGO to interpret and inform its decision-making processes as part of its go-to-market strategy.

“Our top priority is to meet and exceed customer demands through design and delivery of high-quality products using the finest materials. Of equal importance is the accessibility of our goods by ensuring they are available when and where our customers are,” said Maximiliano Ojeda, co-founder, Chairman and CEO of MGO Global, Inc. ”In seeking a technology partner to offer us a high level of visibility into our global supply chain, we required a company that understood our industry, had the technical innovation to support our goals, and possessed the expertise to successfully manage it. For these and future supply chain needs, BlueCherry met and exceeded our expectations.”

“MGO faced a familiar challenge in its need to shorten rotation cycles for marketplaces like Shopify but

weren't sure where to start. It's a great example of why it's so important for organizations in similar positions to partner with companies like CGS BlueCherry, which understand the subtleties and nuances of the fashion and apparel industry," said Paul Magel, CGS president, Application Solutions business. "We're thrilled to welcome MGO into our customer portfolio and look forward to helping them achieve an accelerated return on investment as it diversifies its customer touchpoints."

## ***Mizuho Bank Modernizes Core Banking Operations with Oracle***

2 February 2023

Mizuho Bank, Ltd., the integrated retail and corporate banking unit of Mizuho Financial Group and one of Japan's largest financial services institutions, is modernizing its legacy banking system for international operations with Oracle. Over the coming years, Mizuho will implement Oracle's banking solutions to support critical functions, including direct deposit accounts and liquidity management, at its operations in major overseas offices. The roll-out began with the successful replacement of Mizuho's legacy banking system at its New York offices.

"When considering replacing our legacy banking system, we sought a partner with proven solutions and expertise in our market, to help us deliver greater value, faster," said Takafumi Kawamura, General Manager of IT & Systems Control Department No2, Mizuho Bank. "We knew Oracle could deliver the security, scalability, and resilience required. Its functionally rich offering will enable us to quickly adapt to changes in the market and capitalize on new opportunities now and into the future."

Oracle's solutions are allowing Mizuho to enjoy the benefits of real-time processing support, a high level of STP for deposit operations and cash management services, and integrated postings between branches and subsidiaries for core banking operations.

"Mizuho prides itself on building lasting customer relationships by leveraging its global reach to act faster, see further, and adapt better in every decision, every day," said Sonny Singh, executive vice president and general manager of Oracle Financial Services. "We have long been recognized for our ability to help the world's largest banks standardize on a modern set of technologies to significantly improve how business gets done across multiple geographies. With Oracle, Mizuho can deliver on its customer-centric mission by gaining agility, flexibility, and speed across the systems that matter most. With this Oracle foundation, the bank will be able to continue to evolve its products and services to best meet the needs of both its customers and stakeholders around the globe."

In addition to its use of Oracle FLEXCUBE and Oracle Banking Liquidity Management, Mizuho Bank also recently went live on Oracle Fusion Cloud Enterprise Resource Planning (ERP) to support financial processes in its NY accounting department. The bank will expand the deployment to include the bank's operations in Singapore and additional global business centers.

## ***Taulia Signs Memorandum of Understanding with Aramco to Explore Supplier Financing Solutions***

6 February 2023

Taulia, a leading provider of working capital management solutions, today announces it has signed a Memorandum of Understanding (MoU) with Aramco, one of the world's leading integrated energy and chemicals companies, to discuss Taulia providing supplier financing solutions.

As part of its In-Kingdom Total Value Add (iktva) program, which strives to accelerate digital transformation efforts domestically, Aramco recently signed over 100 agreements to help advance a diverse, sustainable and globally competitive industrial ecosystem.

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Taulia is undertaking the program in collaboration with J.P. Morgan and Manafa Capital.

Cedric Bru, CEO of Taulia, comments: “Through this program, we are paving the way for thousands of businesses worldwide to access affordable financing options and manage their liquidity as they continue to navigate through uncertain economic times.”

Ziad T. Murshed, Executive VP & CFO of Aramco, comments: “This is a great step towards enabling local suppliers to access funding options to support the industrial ecosystem and strengthen our local supply chain.”

## ***The central warehouse at Aalborg University Hospital reaches new heights***

2 February 2023

### **Aalborg University Hospital turns its attention towards the efficiency in the new central warehouse with LOGIA’s WMS-system.**

In 2026, when the hospital opens its doors to a total of 170.000 m<sup>2</sup>, a high level of automation will frame the entire hospital. The hospital’s 5.500 m<sup>2</sup> warehouse area acts as the central warehouse for all hospitals in the Northern Region of Denmark. It is responsible for the internal delivery and deliveries to external branches such as health clinics, treatments in private homes, and hospitals in Greenland.

This results in potentially approximately 600.000 annual picking transactions, delivered to 6.600 delivery addresses in total. The automation holds many potentials and enables even more daily transactions with the same amount of resources as before.

With the purpose of increasing the efficiency of the warehouse, the use of area and storage layout were taken into reconsideration. Therefore, the central warehouse is equipped with six vertical storage lifts and pallet- and rack storage, from which various orders are picked and assembled. All internal orders are delivered to the hospital’s internal departments by self-driven AGV’s and contribute to increasing the efficiency. The efficiency is strengthened further through the hospital’s electronic tag system that manages the departments’ reordering and delivery of goods.

The new set-up with LOGIA’s WMS-solution is intended to enable the hospital to handle around 5000 item numbers compared to the previous number of around 2100 item numbers. Also the general efficiency and consistency of supply will be strengthened as a result hereof. Thereby, the employees can focus on the patients and will always have the necessary equipment and goods at hand, to ensure the patients the best care.

## ***Trimble Technology to Help Power Nissan's Most Advanced Driver Assist System to Date***

9 February 2023

Trimble announced that Nissan Motor Co. Ltd. will use Trimble RTX<sup>®</sup> technology as its high-accuracy positioning source, enabling the hands-off and guided freeway driving capabilities of the ProPILOT Assist 2.0\* driver assistance system, available initially on the 2023 Nissan Ariya.

While positioning with standard Global Navigation Satellite System (GNSS) signals may drift up to 10 meters (25 feet), Trimble RTX provides higher accuracy and enables consistent lane determination for driving applications. This makes Trimble RTX a key component for many of the latest driver assistance systems like the ProPILOT Assist 2.0. Increasingly being used on freeways, lane-level accuracy via advanced driver assistance systems (ADAS), where the driver is still the ultimate decision maker, is a key enabler in the journey to fully autonomous solutions.

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"Trimble has been at the forefront of precise positioning for decades and has served the automotive segment for nearly as long," said Patricia Boothe, general manager, On-Road Autonomy at Trimble. "We've applied the combination of technology leadership and domain experience to enable more than 30 million miles of confident driving with hands-off driving systems."

The ProPILOT Assist 2.0 system enables hands-off driving while cruising in a single lane. When the vehicle approaches a road divide, or when passing a slower vehicle is possible, the system judges the appropriate timing of branching off or passing based on information from the navigation system and 360-degree sensing. Intuitive audio and visual guidance is given to the driver, who is then prompted to put both hands on the steering wheel and confirm the operations.

Trimble's positioning solution, underpinned by its integrity monitoring capabilities, enables consistent lane-level positioning in complex, real-world driving environments. As with any current steering system, the driver must remain alert and attentive at all times.

The Trimble RTX network is supported by a globally redundant and resilient infrastructure—backed by a team of ISO 20000 certified network engineers and IT specialists, monitoring operations around the clock to ensure optimal signal performance and reliability for drivers who will depend on it. Trimble's RTX positioning technology can provide decimeter-level accuracy in seconds, making it an ideal solution for autonomy applications, including automotive driving, when accuracy, speed of convergence and accessibility to a single global network matter.

\*ProPILOT Assist 2.0 can't prevent collisions. Driver at all times responsible to maintain safety by monitoring traffic, controlling vehicle, and if needed steer, brake or accelerate. System works only when lane markings detected and does not function in all weather, traffic and road conditions.

## Product News

### ***AI-designed Chips Reach Scale with First 100 Commercial Tape-outs Using Synopsys Technology***

7 February 2023

Synopsys, Inc. reaches scale for AI-driven chip designs as major semiconductor customers register the first 100 commercial tape-outs with the company's award-winning Synopsys DSO.ai™ autonomous design system. Recent customers, including STMicroelectronics and SK hynix, have all seen significant uplifts in productivity and PPA, and are now charting a new design course using reinforcement learning-enabled design tools on cloud and on-premise.

By using Synopsys DSO.ai (Design Space Optimization AI) the companies are setting a blistering pace for the development of advanced-node chips through the key design phases. Results from customers since the launch of Synopsys DSO.ai speak for themselves: more than 3x productivity increases, up to 25% lower total power and significant reduction in die size, with reduced use of overall resources.

STMicroelectronics (ST), a global semiconductor leader serving customers across the spectrum of electronics applications, is using cloud-based versions of DSO.ai to generate extra momentum on the most intensive design phases. STMicroelectronics taped-out using Synopsys DSO.ai coupled with Synopsys Fusion Compiler™ and Synopsys IC Compiler™ II physical implementation tools.

"Using the Synopsys DSO.ai design system on Microsoft Azure, we increased PPA exploration productivity by more than 3x, allowing us fast implementation of a new Arm core, while exceeding power, performance and area goals," said Philippe d'Audigier, system-on-chip hardware design director

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at STMicroelectronics. "We look forward to accelerating our collaboration with Synopsys and Microsoft as we explore more opportunities for new industry-leading chip designs for key projects, including ST's industrial MPUs."

## **Pushing Silicon Performance and Productivity**

Traditional design space exploration has been a highly labor-intensive effort, typically requiring months of experimentation. Using AI technology, Synopsys DSO.ai searches design spaces autonomously to discover optimal PPA solutions, massively scaling the exploration of choices in chip design workflows and automating many menial tasks.

"Delivering high-performance, robust memory products at industry-leading volumes demands intensive optimization, which has traditionally been highly human intensive," said Junhyun Chun, head of SoC (System on Chip) at SK hynix. "Synopsys DSO.ai brings a huge amount of design team efficiency, giving our engineers more time to create differentiated features for our next generation of products. It's also driving fantastic results as demonstrated in a recent project where DSO.ai delivered a 15% cell area reduction and a 5% die shrink."

"AI's ability to explore broader design spaces is accelerating our customers' relentless drive towards better PPA and higher productivity with fewer engineering resources," said Shankar Krishnamoorthy, GM for the EDA Group at Synopsys. "We've monitored the first 100 commercial tape-outs by customers using Synopsys DSO.ai and the results are compelling. Whether they're designing in the cloud, on-premise or a hybrid of the two, it's clear that in every case, designers are seeing significant gains from optimized designs delivering better results and faster time-to-market. The cloud-side is particularly exciting as deploying Synopsys AI technology at scale in data centers ushers an exciting new era for designers everywhere."

"Microsoft is committed to democratizing advanced chip design, so it was a natural move for us to host the Synopsys DSO.ai design system on Azure," said Jean Boufarhat, corporate vice president, engineering, Azure Hardware and Infrastructure at Microsoft. "With AI-powered chip design on Azure, companies can leverage cloud-scaling to boost productivity and optimize very large solution spaces like high-performance computing."

## ***Ansys Expands Cloud-Based Simulation Solutions Through Extended Collaboration with Microsoft***

9 February 2023

Ansys is extending its long-term strategic collaboration with Microsoft to accelerate virtual product design through expanded cloud-based access to Ansys' simulation solutions and computer-aided engineering (CAE) tools. As a next step, Ansys will develop a new offering that will enable customers to launch Ansys products using their Azure enrollment and connect third-party tools more easily.

As an integral component of the collaboration, Ansys will expand its go-to-market strategy with Microsoft, including digital twins connected to the internet of things, autonomous driving and flying systems development, and the use of simulation data to train artificial intelligence/machine learning (AI/ML) systems. Mutual customers who migrate to the cloud can increase productivity, reduce in-house technology costs, and improve virtual collaboration.

Ansys Access on Microsoft Azure will be a new offering available on the Azure Marketplace that will provide an alternative to Ansys' current managed cloud offering, Ansys Cloud Direct, which also runs on Azure. This new offering will enable customers to use their existing Ansys applications along with Azure services purchased directly from Microsoft to deliver cost-savings and improved data

management as well as greater flexibility. The addition of Ansys Access on Microsoft Azure to Ansys' current cloud offerings will allow customers to choose the most effective method to realize the benefits of cloud-based simulation for their organizations.

Beyond cloud collaboration, Ansys is also working to integrate Microsoft 365 capabilities into the context of its engineering simulation tools to aid in the highly collaborative process of product design.

“Ansys Access on Microsoft Azure will enhance the development and design processes of our mutual customers through increased productivity, sharper workflows, and greater access to cloud-based CAE tools,” said Shane Emswiler, senior vice president of products at Ansys. “By pairing Ansys' industry-leading simulation solutions with Azure, customers can innovate at scale in a virtual environment without compromising design accuracy or product integrity.”

“Our continued collaboration connects the cloud computing capabilities of Microsoft Azure with Ansys' advanced simulation solutions to better enable virtual design and innovation worldwide,” said Kurt Niebuhr, Principal PDM Manager at Microsoft. “In a time when digital solutions are needed more than ever, our collaboration enables us to provide engineers and innovators with cloud-based tools that meet and exceed their needs.”

## ***Aspen Technology Combines Inmation Software and AIoT Hub to Advance Customers' Digital Transformation Strategies***

6 February 2023

Aspen Technology, Inc., a global leader in industrial software, announced it has combined its AIoT Hub with Inmation Software to create an expanded business unit. Now known as AspenTech DataWorks, the rebranded business unit provides customers with a singular solution to access and manage their industrial data, whether at the plant level or enterprise wide, in support of their digital transformation strategies.

“A holistic data management strategy is the foundation of a successful digital transformation journey,” said Nicole Rennalls, VP and General Manager of AspenTech DataWorks. “Our customers need a flexible, scalable solution to harness the huge amounts of data being generated across the enterprise. AspenTech DataWorks provides this and uniquely meets the needs of the executive suite and plant floor, all at once.”

Asset-intensive industries looking to maximize value from industrial data often are challenged to do so securely and economically as the data is often trapped in different silos across the organization. AspenTech DataWorks addresses these challenges by aggregating and contextualizing data, both transactional and real-time, from assets across the enterprise using powerful integration technology. With this unique, industry leading offering, organizations are now able to realize successful digital transformation, with capabilities including:

- Data Governance – Centralized, flexible data management that supports contextualization and user access control, as well as encryption for all data types
- Connectivity – Vendor-neutral connectivity to all major OT and IT interfaces that allows organizations to integrate data from disparate sources and manage from a centralized system
- Data Integration– Value-added application enablement such as advanced analytics, decision support, and AI

The cornerstone of AspenTech DataWorks is Inmation Software GmbH, one of the world's leaders in the field of global and industrial real-time information management. AspenTech announced the

acquisition of inmotion last October. "The addition of inmotion Software to the AspenTech portfolio is a huge step forward to help companies unlock more value from an industrial data strategy. The real-time data platform connects diverse systems and addresses many problems with data cleansing, contextualization and scalability," said Peter Reynolds, Principal Analyst, ARC Advisory Group.

## ***Autodesk BIM 360 Document Management – January 2023***

8 February 2023

Joan Allen of Autodesk announced that the January update of Autodesk BIM 360 Document Management includes enhancements to Archiving Reviews, Editing Naming of Active Reviews, Creating Transmittal from Closed Reviews, and Choosing "Time Allowed" type for Reviews. Read the full details of this update here: <https://blogs.autodesk.com/bim360-release-notes/2023/02/08/document-management-january-2023/>

## ***AVEVA Launches New Version of Manufacturing Execution System Software to Support Data Center Deployments***

6 February 2023

AVEVA, a global leader in industrial software, driving innovation and sustainability, announced the release of AVEVA Manufacturing Execution System 2023, which offers to cut the costs and complexities of multi-site Manufacturing Execution System (MES) solutions.

The latest version of AVEVA Manufacturing Execution System (MES) will help standardize and introduce best practice more quickly and at scale which in turn will improve operational efficiency and sustainability. The new AVEVA Manufacturing Execution System 2023 also promotes increased supply chain resilience and agility with unified visibility, reporting and KPIs across multi-site operations.

Traditionally, MES solutions have been used locally in plants – requiring robust individual IT infrastructure and systems – significantly increasing total cost of ownership. The new update will provide support for multi-site solutions with a single MES centrally deployed in a corporate data center.

Automated production processes and Industrial Internet of Things (IIoT) devices are connected with a small footprint of computing assets that collect data "at the edge" of each plant and send it to the central MES.

The new release embraces worker shift management and includes security enhancements to support multi-site MES data center deployments across different time zones, languages and cultures.

**Keith Chambers, Vice President Operations Management Software, AVEVA, said:** "Amid a backdrop of continued disruption and rising costs, our customers are under pressure to close the business to plant collaboration gap, and improve the efficiency of their manufacturing networks."

"The new AVEVA Manufacturing Execution System 2023 release enables the business to drive digital transformation simultaneously and consistently across multiple connected plants. It will provide a single version of the truth and promote agile supply chain management. In the post-pandemic era, manufacturers' success will be defined by their ability to be agile and resilient in the face of change."

## ***Blackline Safety Launches First EU Service Centre***

9 February 2023

Blackline Safety Corp., a global leader in connected safety technology, announced the launch of its first European Union (EU)-based service centre.

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As Blackline has achieved 118% revenue growth over the last two years in Europe, the service centre is designed to meet heightened customer demand across the region. The facility occupies a dedicated area within Blackline's French site, strategically located in the industrial heart of north-eastern France near Lille, and is staffed by an established in-house team of technical and product specialists. Blackline will provide local customer service and offer rentals for Europe out of the centre.

“With an expanding customer base across Europe, Blackline recognises the need for dedicated regional support in the EU,” said Simon Rich, Sales Director, Blackline Safety Europe. “Our connected safety wearables and area gas monitors offer a high degree of configurability for a variety of job functions and situations, as well as over-the-air firmware updates which can significantly reduce downtime, and the cost and complexity of fleet management. The ability to offer hands-on service and device maintenance on the continent should the need for service or repair arise, is key to keeping those devices out in the field where they belong, for the maximum possible time.”

The launch coincides with successful quality and environmental audits of Blackline Safety Europe's existing ISO 9001 Quality Management and ISO 14001 Environmental Management standards in both its flagship facility in Colchester, United Kingdom and French office, demonstrating the company's continued commitment to operating sustainably and delivering top quality products and systems.

The new service centre will also support Blackline Safety's rental offering in Europe, starting in late spring. Already established in North America, Blackline offers rental options for its complete portfolio of connected personal gas detectors, area monitors, lone worker wearables and accessories – all of which include Blackline Live online reporting and analytics software. Understanding the unpredictability of work and importance of staying on budget, Blackline's rental programme is designed to offer users full flexibility, taking a consultative approach to ensure a well-planned and customised safety solution that provides maximum protection for every project.

## ***Carlson SurvPC 7 Available Now***

6 February 2023

The latest version of Carlson Software's industry-leading field software, SurvPC 7, is now available.

The new release, boasting numerous improvements to existing features and many completely new capabilities, brings greater efficiency, enhanced data visibility, and a smoother user experience to land surveyors, engineers, and construction and GIS professionals.

“SurvPC 7 is a major update that puts more power in the hands of people working on site,” said Sarah Winter, Director of Carlson's Field Software Programming Division. “It's really a big step forward in field software, done without sacrificing the familiar efficient look and structure our users know.”

The new version comes loaded with new functionality, from the advanced averaging features that help users improve their GPS solutions and satisfy stringent survey requirements for GPS-collected data, to better reports, least squares adjustment in the field, and Esri ArcGIS capabilities. Completely new modules have been introduced for utilizing BIM files in the field, monitoring, and tunneling.

The advances in SurvPC 7 take advantage of the processing power of Windows 10 or 11. Carlson SurvCE, which runs on the discontinued Windows CE mobile platform, will continue to be supported, but will not receive major updates past version 6. SurvCE users will have the ability to crossgrade to SurvPC on compatible hardware.

SurvPC 7 is available in more than two dozen languages including English, Spanish, German, French, French (Canadian), Russian, Portuguese, Czech, Dutch, Greek, Italian, Polish, Hungarian, Swedish,

Latvian, and more.

## **New features in SurvPC 7 include:**

- SurvNet least squares adjustment in the field
- BIM Support for viewing and 2D/3D staking (IFC and RVT)
- Esri ArcGIS Online integration
- Enhanced graphical averaging with full data visibility
- Customizable report generation with field email option
- Catenary survey for robotic total station
- Auto refreshing reference drawings
- Total station monitoring
- Advances in road staking to support BIM and DTM models with real time sectioning
- Fully customizable user hot list

Those seeking training on SurvPC 7, along with Carlson's other hardware and software solutions, should consider our upcoming 40th anniversary user conference, May 2-4 in our hometown of Maysville, KY.

## ***Cortona3D RapidAuthor 14.2 released: automatic generation of IPC pages, raster editor, logical operations in the 2D editor, and new visual effects for HTML publications***

7 February 2023

Cortona3D is proud to announce the release of RapidAuthor 14.2, the latest version of its powerful technical documentation software. This new version includes a range of exciting new features and improvements that will help users create high-quality 3D animated and traditional 2D technical documentation with ease.

RapidAuthor 14.2 introduces the ability to automatically generate IPC pages based on the assembly structure, reducing the need for manual work and speeding up the production of parts catalogs.

Additionally, the ability to prepare context geometry with RapidIllustrator and reuse it in different projects will save users significant time and effort, allowing them to focus on more important tasks.

Another important addition in RapidAuthor 14.2 is the new Unmerge command, which allows authors to break apart previously merged objects and make further edits and adjustments as needed. The new publishing options, including advanced visual effects in 3D publications, improved S1000D authoring, and integration with TeamViewer AR, will take users' publications to the next level.

The new raster image editor in Cortona2D Editor Pro will allow users to edit scanned legacy images, streamlining the authoring process and eliminating the need to switch to other software. This new feature is sure to be a time-saver for many users. Other improvements in 2D editing include logical operations and enhanced snapping and filling functionality.

"We are excited to release RapidAuthor 14.2, which represents a major milestone in the development of our technical documentation software," said Moritz Menzel, VP of Strategy from Cortona3D. "With its new features and improvements, we are confident that this version will be a valuable asset to our customers and help them to create and maintain high-quality technical documentation more efficiently."

RapidAuthor 14.2 is available now. If you are an existing user of RapidAuthor with an active

maintenance program, you will receive a notification with downloading instructions. RapidAuthor 14.2 for Teamcenter will be available in several weeks, a corresponding notification will be also distributed to the users. If you are new to RapidAuthor, you can take advantage of a free trial period to experience first-hand how powerful and easy to use the software is.

## ***EagleView Builds on Recent Launch of EagleView Cloud, Expands Imagery Archive and Resolution Options for All Enterprise Customers***

7 February 2023

EagleView, a leading provider of aerial imagery, data, and analytics announces the expansion of its EagleView Cloud offering to all customers following a successful launch to Government customers. EagleView Cloud for enterprise is a one-stop shop for customers who want access to high-quality and frequently captured aerial imagery that can be used to improve their capacity to make data-driven decisions.

“With EagleView Cloud for enterprise and our innovative, patented capture technologies, we are advancing our capabilities to provide customers and the market with a platform and data that meets their needs,” said Chris Jurasek, EagleView’s Chief Executive Officer. “This is an exciting time for us here as we continue to push the envelope in geospatial and aerial imagery innovation.”

In addition to expanded availability in roofing, solar, insurance, infrastructure and other commercial markets, EagleView Cloud will now cover more than 94% of the US population. This includes 1”, 3” and 6” image capture over more urban areas flown as frequently as 2x per year. With the inclusion of more frequent and more distributed images, EagleView reaffirms its position as the leader and industry standard for customers who need property-specific imagery and data.

These upgrades enable process improvements across multiple industries, such as:

- Residential and commercial property service providers who want to improve their business processes by reducing the amount of site visits and surveys, thus reducing everyday operating expenses.
- Companies that need to assess and respond to changes in landscape by vegetation or by building expansion.
- Insurance carriers who can now utilize improved access to pre-event imagery to better understand severity of claims and more rapidly respond and process those claims with greater confidence.

“EagleView’s product offering is second to none. Here at Deep Lawn, we utilize the imagery and data to analyze the scope and condition of an end user’s lot and empower our customers to make better project bids,” said Joel Northrup, Deep Lawn’s Chief Executive Officer. “Having easy access to such amazing data and imagery helps keep Deep Lawn the industry leader in Landscape Technology.”

This subscription-based service offering will provide the market with the recency and coverage that is needed to power their businesses as well as stable pricing for the length of the subscription.

## ***e-CAD Steel now supports GstarCAD 2023***

6 February 2023

e-CAD Steel, a multi-platform and multi-language add-on for popular CAD products, now supports the latest version of GstarCAD 2023.

## What e-CAD Steel does

The e-CAD Steel add-on provides flexible drawing of many types of standard steel elements in the following view options: 2D cross-sectional profiles, 2D views (top, bottom, left, or right) and fully three-dimensional models. Based on automatically inserted descriptions, different summaries (lists) can be generated for engineering drawing tables and CSV®-format text files.

## Why you should try e-CAD Steel on GstarCAD 2023

Users can run e-CAD Steel on all version of GstarCAD and the new features and improvements in GstarCAD 2023 help users to make the most out of e-CAD Steel to deal with steel structures and engineering projects and have automatic trimming of steel elements and much more.

## *Infosys Collaborates with GE Digital to Deliver Energy Transition Solutions*

7 February 2023

Infosys, a global leader in next-generation digital services and consulting, today announced a strategic collaboration with GE Digital, GE's software division, to accelerate grid transformation for the utilities sector. Together, GE Digital and Infosys will follow a joint go-to-market approach to deliver value added solutions for grid related products and services, for their new and existing clients.

Infosys and GE Digital will jointly bring these solutions for the utilities industry to help grid operators realize a more reliable, resilient, and sustainable grid. This will be driven by an industry-leading grid orchestration software platform and a suite of intelligent applications that bring together energy data, network modeling, and artificial intelligence (AI). This collaboration combines GE's deep expertise and experience with utilities in the energy sector, and long years of investment in grid equipment and platforms, and Infosys' breadth of business transformation, system integration, and advanced technology capabilities that will enable efficient electric grid orchestration.

This engagement builds on Infosys' eighteen-year relationship with GE, that includes collaboration on innovative technology crucial for energy transition.

Infosys will build a GE Digital Center of Excellence (CoE) to expand the talent pool for the GE GridOS® portfolio and bring in best practices in service delivery. Infosys will also invest in accelerators to integrate the GE platform and application suite into enterprise ecosystems and address client specific requirements. In addition, Infosys will bring in digital capabilities in areas like AI, Cloud, Cybersecurity and Industrial IoT to support utility transformation. This 360-degree collaboration will enable Infosys to work with GE to deliver the benefits of Information Technology and Operational Technology (IT-OT) convergence to utilities.

“With energy transition driving increasing complexity on the grid, alignment between IT and OT is becoming very important,” said, **Mahesh Sudhakaran, General Manager, GE Digital Grid Software**. “Our collaboration with Infosys will help accelerate adoption of grid software that bridges these disciplines, equipping the next generation of grid operators with the tools they need to keep the grid stable, resilient, and sustainable. The utility's ability to not just manage but orchestrate the clean energy grid relies on a unique combination of software and partnership for strategy building, as well as execution of solutions. Infosys' clear understanding of GE solutions and strong commitment to leadership will enable significant productivity and service level improvements, along with critical cost efficiencies.”

**Ashiss Dash, EVP & Global Head - Services, Utilities, Resources and Energy, Infosys**, said, “We are delighted to collaborate with GE Digital to drive the digital transformation of the electric grid which

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is very crucial for energy transition. Through our GE Digital Center of Excellence, we plan to bring product depth, scale, and service delivery best practices to this rapidly growing market. With a comprehensive understanding of utility business requirements and challenges, we look forward to leveraging our technological prowess and domain expertise to enable this transformation as part of this 360-degree collaboration.”

## ***Introducing NX for BIM***

6 February 2023

Announced in a blog post by Jamie Tyler, Siemens has released BIM for NX. Jamie says “Built on the core foundations of NX, the tool is a multi-disciplinary design tool, packaging up Algorithmic Modelling, freeform shape modelling, steel structures, MEP etc. We’ve built a collaborate design environment to eliminate mistakes that can happen when designing in isolated silos. The result? Design changes are propagated and multiple teams throughout the pipeline continue to work on the most up-to-date datasets.” To read the full details of the release please visit: <https://blogs.sw.siemens.com/nx-design/whats-new-in-nx-bim/>

## ***L&T Technology Services to expand its Industry 4.0 suite of offerings in North America, develop solutions for the new manufacturing era***

8 February 2023

L&T Technology Services Limited, a leading global pure-play engineering services company, has unveiled a new suite of offerings centered around Industry 4.0 technologies for key verticals like transportation, medical devices and hi-tech and making use of latest innovations in Artificial Intelligence (AI), robotics, 3D-vision systems, and connected machines.

LTTS’ team of engineers is developing implementable services and solutions on transformational technologies to usher in the new manufacturing age for customers in North America. To this end, the Company recently launched a new center of excellence in its Peoria, Illinois design center to offer turnkey solutions that combine customer product concepts with LTTS’ design, simulation, proof of concept, and prototyping capabilities.

Named as *IDigitalPlace Center of Excellence*, the Peoria CoE will leverage next-generation manufacturing technologies and enable customers to redefine their product journeys. The areas of applications include AI, robotics, 3D-vision systems, and connected machines. With a focus on communicating machine language with cutting-edge Manufacturing Execution Systems and enabling next-gen digital twins, LTTS will help drive innovative solutions across the digital manufacturing spectrum in the USA. LTTS’ digital manufacturing services will provide customers with a one-stop-shop solution that covers everything from product design system sourcing to delivery and aftermarket.

Over the years, LTTS has undertaken significant investments across 7 major design centers in the USA across Peoria, Rockford, IL, Plano TX, Santa Clara, Dublin, Ohio, Windsor Locks, CT and Bettendorf, IA, focusing on design, engineering and manufacturing services for customers in multiple industries.

The Company plans to further expand these design hubs to offer various services, including embedded software and hardware solutions, and advanced process analytics utilizing AI, ML, and predictive maintenance.

LTTS works with 69 Fortune 500 companies and brings specialized engineering and R&D skills to enhance their profitability, regulatory compliance and productivity from concept development through launch, positively impacting the entire product lifecycle.

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*“To be a strategic differentiator, and drive meaningful customer experience (CX), LTTS strives to become a key enabler of the digital economy in today’s experience-driven marketplace. Our design and engineering hubs in the USA represent the convergence of our digital innovation and consulting capabilities to support our global customers in the process industry. Amid the recent tech shake-up and the growing business complexity, organizations are constantly juggling multiple competing priorities. They are looking at partners who can recognize and continually value add to the relationship. We collaborate with our customers to align them with new market realities through sophisticated solutions and industry best practices”* said **Rodney Duran, Vice President, Digital Manufacturing Services North America at L&T Technology Services.**

LTTS will be showcasing its latest solutions in Digital Manufacturing at Booth #27 at the ARC Leadership Forum in Orlando.

## ***NEW SEMI ONLINE LEARNING PLATFORM DELIVERS SEMICONDUCTOR TRAINING TO SUPPORT WORKFORCE DEVELOPMENT FOR INDUSTRY GROWTH***

7 February 2023

Taking aim at narrowing the global semiconductor industry talent gap, SEMI announced a new online learning platform designed to support industry efforts to train and upskill employees and help incoming talent establish their careers. The new SEMI University™ platform launches with more than 360 courses created for the industry, providing an easy-to-use online semiconductor training program for employees ranging from recently hired facility operators to experienced technicians, engineers and non-technical staff.

SEMI University offers semiconductor courses on front-end and back-end manufacturing operations, principles of chip design and workplace safety. The platform also includes classes to help learners keep pace with rapidly evolving technologies such as artificial intelligence (AI), MEMS and optoelectronics. SEMI University provides flexibility for users to pause and restart courses later, and the platform includes courses in multiple languages and will add more.

“With the global semiconductor industry expected to nearly double in annual revenue to \$1 trillion around the end of the decade, SEMI projects the industry will need more than 900,000 new workers worldwide by 2030 to support this growth,” said SEMI president and CEO Ajit Manocha. “Our member companies have highlighted workforce development as a top concern in pursuing long-term growth. The new SEMI University platform will help industry newcomers contribute quickly and complement companies’ efforts to aid current employees of various levels in advancing their careers. Looking forward, we are actively seeking to expand our content partnerships to meet the training needs of the broader electronics supply chain.”

SEMI has offered in-person training and technology trend updates more than 50 years, and it hosts webinars covering SEMI standards, market dynamics and semiconductor manufacturing and design best practices. The SEMI University platform builds on this experience and adds to the association’s holistic Workforce Development program, which includes initiatives to increase awareness of semiconductor industry careers, connect member companies with university students for mentoring and internships, attract and train military veterans, and develop a more diverse and inclusive workforce.

## ***Schneider Electric Expands Grids of the Future Portfolio with Stepwise Journeys for Digital Transformation***

7 February 2023

Schneider Electric, the leader in the digital transformation of energy management and automation, announced the next phase in its Grids of the Future offerings at DISTRIBUTECH International® 2023, the leading annual transmission and distribution event for utilities, technology providers, and industry leaders.

North American utilities are facing significant disruption with a climate emergency, talent scarcity and energy crisis, further exacerbated by prosumer revolutions on the demand side. To provide guidance through this unprecedented change, Schneider Electric has expanded its Grid to Prosumer portfolio to help customers and utilities transform and digitalize their business across the energy value chain.

“Rather than a barrier, this inevitable new energy landscape presents an opportunity for utilities to transform their businesses by reimagining their existing business models, capturing infrastructure Investment and Jobs Act (IIJA) funding, and digitalizing the demand and supply sides,” said Gary Lawrence, Power and Grid Segment President at Schneider Electric. “We are proud to have a robust and continuously evolving portfolio to serve as a trusted partner in the journey toward Grids of the Future.”

### **Delivering the Broadest Spectrum of Solutions to Manage the Lifecycle of the Grid**

**Stepwise journeys for digital transformation:** As utilities face complex grid, power generation, and energy transition challenges, rapid innovation with agile deployments helps utilities achieve near-term benefits while laying a foundation for bold long-term visions. Adopting a stepwise approach allows utilities to start small and scale over time by initially focusing on the most pressing customer needs and grid locations versus deploying solutions systemwide all at once. The Grid to Prosumer approach addresses distributed energy resource (DER) management needs across enterprise technology and business processes. An example stepwise journey for DER management starts with modeling and simulation, then incrementally advances to situational awareness, simplified optimization, advanced optimization and market integration.

**First-of-its-kind home energy management solution:** Schneider Electric has made additional investments in Grid to Prosumer with extended offerings that now include home energy management. Award winning Schneider Home provides homeowners with energy independence through an integrated home energy management solution – controlled by a single, easy-to-use app – that automates energy production, storage, measurement and control, making homes efficient, resilient and sustainable. With a multi-faceted approach guided by a foundation of digital transformation, utilities can integrate with Schneider Home to maximize grid flexibility, respond to changing prosumer priorities and optimize across market needs.

**EcoStruxure™ Grid Operation deployable on Azure for outage management:** Schneider’s Grid Operations Platform as a Service was built to address current and future challenges for grid operators, including small to medium utilities looking to modernize. Now EcoStruxure™ Grid Operation is available as a cloud deployable solution hosted on Microsoft’s Azure infrastructure. With this agile approach to outage management, grid operators can focus on core business strategies versus maintaining and updating IT infrastructure. This advancement is one of many examples that support Schneider Electric’s #1 ranking in the Guidehouse Insights Leaderboard for ADMS Vendors report.

**AI-powered vegetation management for grid resilience:** Schneider Electric also announces a new joint grid resilience offering with AiDash, which addresses modern day infrastructure and environmental

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challenges, such as aging power grids, decarbonization and distributed power generation, vegetation growth inside rights-of-way, and the impact of storms and wildfires. Now, utilities can leverage the latest in analytics to prevent power outages, predict future outcomes, and build climate resilience.

**EcoStruxure™ Transformer Expert for asset maintenance and operations:** Acknowledging the essential role transformers play in today's energy landscape, Schneider Electric has launched EcoStruxure Transformer Expert, an easy-to-deploy monitoring solution for higher ROI. It includes IoT sensors and software analytics for oil transformers that can be leveraged for oil transformers of all ages, regardless of manufacturer. It helps maximize operations uptime and operational efficiency, reduce maintenance costs and extend lifetime by providing full visibility into health status and operations to drive data-driven decisions and optimization.

**Substation control for secure operations:** PowerLogic T500 offers a substation controller for distribution automation in a single, low-power-consuming device. Delivering advanced cybersecurity features to minimize business disruption while ensuring peace of mind with certified IEC 62443 SL2 compliance, it is easy to use throughout the product lifecycle and ensures a fully digital experience. Complete with an intuitive configuration tool and a flexible web-based user interface, PowerLogic T500 is integrated with EcoStruxure™ System Management, advanced data management software that helps reduce electrical faults and downtime by providing operators with the capability of performing maintenance on connected devices in diverse, multi-vendor environments.

**Service plan portfolio for asset lifecycle management:** Providing exclusive support to optimize operations, Schneider's EcoCare membership offers depth expertise combined with innovative digital capabilities across the equipment lifecycle for decarbonization and electrification, while EcoConsult delivers consulting expertise and actionable insights for safety, resiliency, efficiency and sustainability. Finally, EcoFit minimizes waste to position your business for the future. Schneider is welcoming new EcoCare Members to enjoy the innovation service plan for low and medium-voltage equipment.

## ***Schneider Electric Launches Industrial Digital Transformation Consulting and Deployment Service***

7 February 2023

Schneider Electric, the leader in the digital transformation of energy management and automation, launched its new Industrial Digital Transformation Services, during the 27th Annual ARC Industry Leadership Forum, taking place in Orlando, Florida, from February 6-9. The specialized global service is designed to help industrial enterprises achieve future-ready, innovative, sustainable, and effective end-to-end digital transformation.

Based on a proven and scalable methodology for impactful industrial digitalization, services include discovery, diagnosis, strategy, design, implementation, and ongoing customer success. Industrial enterprises can now draw on Schneider Electric's deep industrial and energy domain expertise, supported by its suite of industrial software capabilities, to achieve demonstrable impact across a range of targets, including:

- operational efficiency and workforce empowerment
- sustainability and energy efficiency
- asset optimization
- cybersecurity

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In addition to industrial digital transformation services for its customers, Schneider Electric is one of the few companies in the world that has earned multiple distinctions of 4th Industrial Revolution (4IR) Advanced Lighthouse by the World Economic Forum for its own global smart factories and distribution centers. Lighthouses are factories that have taken 4IR technology from pilot to integration at scale, to transform operations, value chains and business models for compelling financial, operational, and sustainability returns.

Craig Resnick, Vice President, Consulting at ARC Advisory Group, said, “According to our research, about 83% of end users and OEMs are moving forward on their digital transformation journey, but only about 7% feel they have completed the process. Therefore, it’s imperative that end users and OEMs consider using digital transformation services, such as those offered by Schneider Electric, to accelerate their digital transformation journey and more quickly derive financial benefits, while decreasing unplanned downtime.”

“Successful industrial digital transformation requires a global vision that is agile enough to support local needs,” said Marc Fromager, SVP Industrial Automation Services, Schneider Electric. “Successful programs encompass efficiency, sustainability, and employee empowerment, underpinned by robust cybersecurity. What elevates Schneider Electric is our unmatched combination of digital transformation experience across a myriad of industries, supported by our world-leading energy management and automation technology and software—all delivered by local experts with the full backing of our global teams.”

In its *Taking Control of Industrial Transformation* report, OMDIA found that “respondents view digital transformation as not just a cost management driver but as a critical component that offers strategic importance to their businesses and importantly encourages and supports innovation.” In addition, with the climate and energy crises driving further digital transformation as a strategic imperative, industrial enterprises must make meaningful progress on energy efficiency, renewable energy procurement, and electrification.

## ***Stratasys Introduces First Monolithic, Multi-Color 3D-Printed Dentures Solution***

7 February 2023

Stratasys Ltd., a leader in polymer 3D printing, introduced TrueDent™ the first monolithic, full-color 3D printed permanent dentures solution. The TrueDent resin enables labs to create permanent, natural looking gums with accurate tooth structure, shade, and translucency in one continuous print.

TrueDent is an FDA-cleared (Class II) dental resin made specifically for the fabrication of dental appliances, including removable dentures. The resin was developed to be printed exclusively with the Stratasys® J5 DentaJet® 3D printer and GrabCAD® Print software platform. The complete solution will allow dental labs to scale manufacturing by simplifying workflow and reducing processing time for dentures, while achieving a personalized, highly aesthetic dental appliance.

TrueDent is designed to eliminate several barriers for patients and laboratories:

- Potential to reduce chair time for office visits, measurements, fittings and adjustments.
- High fidelity match between scan, design and fit.
- Scalable digital solutions are repeatable, and can provide consistent production of accurate, well-fitting dentures.
- Can increase efficiency through streamlined workflow with less time between scan and delivery.

“Until now, printed dentures and appliances had to be designed and manufactured in multiple parts and

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bonded together,” **said Frank Acosta, Owner of AA Dental Design.** “The TrueDent solution, utilizing Stratasys’ systems and software takes a lot of that stress out. It simplifies the process, lowers the costs, and allows for dentures and temporaries to be produced much faster, achieving incredible aesthetics. We can now expand our prosthetic service printing multi-colored personalized appliance at scale.”

The global dentures market, estimated by Stratasys at \$5.5 billion, is challenged to meet the rising global demand for dentures and appliances through conventional methods due to a shortage of skilled dental laboratory technicians. According to research from iData, in 2021, more than 4.2 million full dentures were created in the United States, and 18 million full dentures were sold worldwide. Of that total, only five percent are estimated to be created through a 3D printed solution. The TrueDent solution offers a scalable alternative with a digital workflow that delivers a predictable, high-quality, fully finished result.

“This new solution will be transformative for the dental industry, and we believe it will help our customers significantly reduce the time and cost of producing dentures and temporaries,” **said Ronen Lebi, Vice President of Dental at Stratasys.** “Stratasys continues to push the boundaries of digital dentistry leveraging our portfolio of advanced 3D printing technologies, including hardware, resins and software to deliver disruptive solutions that make a difference.”

TrueDent resin is patent pending and currently available only in the U.S., and only compatible with the Stratasys J5 DentaJet printer. The material will be unveiled at LMT Lab Day Chicago, February 23-25, 2023. Click the following links to learn more about the TrueDent resin and TrueDent application and Stratasys’ other dental solutions.

### ***What’s New in OpenBOM February, 5th, 2023***

8 February 2023

Oleg Shilovitsky announced on the OpenBOM blog that OpenBOM has been updated as of February 5, 2023. He says “With this release, we are empowering our users to streamline their product data management, collaboration, and procurement functions like never before. Get ready to experience a whole new level of efficiency, accuracy, and flexibility in managing your CAD files, product structure, and processes.”

To read more please visit: <https://www.openbom.com/blog/whats-new-in-openbom-february-5th-2023>