

Contents

CIMdata News.....	4
CIMdata’s VP to Participate in Hexagon’s Nexus Virtual Launch Event	4
The Digital Thread: The PLM Economy Perspective	4
Acquisitions.....	5
Bentley Systems Announces Acquisition of EasyPower®, Leader in Power Systems Engineering Software	5
Company News	6
Accenture’s Innovation in Insurance Awards Now Open for Applications	6
AECOM establishes Sustainable Legacies Centre of Excellence in Singapore	8
Altium Korea Office Officially Opens.....	9
CAPGEMINI GOVERNMENT SOLUTIONS APPOINTS BILL WEBNER AS CEO	9
IFS marks 25th anniversary of the inception of its operations in Sri Lanka as it sees continued success in technology excellence.....	10
Infosys Appoints Shaji Mathew as Group Head of Human Resources	11
Medidata Bolsters Senior Leadership Team to Further Accelerate the Digital Transformation of Life Sciences with Unmatched End-to-End Solutions.....	12
Philadelphia High School Receives Donation to Develop Advanced Manufacturing Program	12
Procore Appoints Sarah Hodges as Chief Marketing Officer.....	13
PROLIM Launches “Digital Innovation Center” at Hubballi, India	14
PTC Extends Executive Agreement With CEO James Heppelmann	14
Revolution in Simulation Welcomes Neural Concept as Newest Sponsor.....	15
Sandvik announces changes to the Group Executive Management	16
Synopsis Study Underscores Need for Comprehensive SBOM as Best Defense in Software Supply Chain Security Efforts	16
Tecsys Appoints Shannon Karl as Chief Marketing Officer.....	18

Trimble Partners with Engineers Without Borders USA to Support Climate Resiliency and Education Efforts.....	19
Events.....	19
Synopsis to Present at Upcoming Investor Events	19
Financial News	20
Capgemini delivers another record performance in 2022	20
Velo3D to Announce Fourth-Quarter 2022 Results on March 2, 2023	26
Implementation Investments.....	26
BWT Alpine F1 Team Bolsters Additive Manufacturing Workflow with Four 3D Systems SLA 750 3D Printing Systems	26
Deoleo pursues sustainability goals while driving operational efficiency with Siemens Xcelerator.....	28
ENDRESS+HAUSER RELIES ON CENIT TO DRIVE TRANSFORMATION.....	28
Grupo MYT Reimagines Casual Dining with Oracle Cloud and Oracle NetSuite.....	29
Nemetschek Group Sponsors XPRENEURS Incubator Track at UnternehmerTUM to Drive Innovation in the Construction Industry	30
OL Groupe selects HPE GreenLake to support its energy efficiency plan and improve the visitor and fan experience.....	31
Oliver Packaging Applies AI to Infor CloudSuite Industrial to Help Provide Critical Food Supplies to Senior Meals Programs, Healthcare Organizations and Schools	33
Siemens and Centrale Nantes to continue cutting-edge simulation research.....	35
Telefónica Germany Selects TCS as Transformation Partner to Build Future-Ready Operations Support Systems.....	36
UK’s Phoenix Group expands partnership with TCS.....	37
WEISS lays foundation for configure-to-order with CIM Database PLM.....	37
Wildfang Takes a Bite Out of Inefficiency with Centric PLM Cutting Errors and Saving Time	38
Product News.....	38
Atos launches new 5G security offering.....	38
AVEVA Advances Predictive Analytics Market with New AI Powered Software Release.....	40
Cadence Delivers 13 New VIP and Expands System VIP Portfolio to Accelerate Automotive, Hyperscale Data Center and Mobile SoC Verification	41
EagleView Revolutionizes Asset Management with AI-Based Solutions.....	42

EON Reality Launches Spatial AI and Announces New Prompt Feature, Startup and Competition Support Programs	43
Hexagon’s digital reality platform, Nexus, is now available to manufacturers – putting an end to silos and enabling faster innovation	45
HOOPS 2023 Toolkits Deliver Improved Simulation, Analysis and Photo-Realism.....	47
Infor Launches New Application to Combat Nurse Shortage for Healthcare Industry	49
LOGIA WMS Expands with SaaS-Solution.....	50
Newforma Outlook Integration Helps Project Teams Connect and Improve Communication	50
pSeven 6.43 Release	51
Wipro Lab45 taps into the power of blockchain technology to change the paradigm in digital identification and verification	52

CIMdata News

CIMdata's VP to Participate in Hexagon's Nexus Virtual Launch Event

20 February 2023

CIMdata, Inc., the leading global PLM strategic management consulting and research firm, announces that its Vice President, Stan Przybylinski, will join a panel discussion to launch Nexus, Hexagon's new open platform to enhance digital engineering and manufacturing. Stan will share his perspective on how digital reality platforms can complement existing technologies like PLM.

Stan will be joined by Ron Bennett of Linamar Corporation, who will discuss how breaking down silos within organizations is key to driving innovation. Rounding out the panel discussion is Christoph Berlin from Microsoft, who will share his thoughts on how SaaS experiences are transforming the manufacturing space through the enablement of the secure exchange of data across disciplines.

The panel discussion will take place on 23 February. To learn more and to register, [click here](#).

The Digital Thread: The PLM Economy Perspective

19 February 2023

Written by [Stan Przybylinski](#)

CIMdata's [2023 PLM Market & Industry Forum](#) series theme is "[The Digital Thread: Powering Business Transformation](#)." At this industry-leading Forum, CIMdata will frame the digital thread in a series of presentations designed to brief the PLM Software and Service community (aka the PLM Economy) on the issues faced by industrial users. Sessions provide critical information to members of the PLM Economy, enabling them to respond to new and evolving requirements. Learn more about the 2023 PLM Market & Industry Forum [here](#).

The notion of the digital thread dates back to the application of digital technologies to the product lifecycle as part of Industry 3.0. Of course, the available technologies have improved dramatically since then, just as the needs of the industrial companies that employ them have evolved. From its roots in engineering data management in the 1980s, data and process management solutions that are at the core of most industrial PLM strategies can now support collaborative product development across far-flung value chains in many industries.

In our recent digital thread research, CIMdata asked industrial firms what solutions were on their digital threads at that time and in the next three years. The survey question focused on the product lifecycle from idea through life and asked about solutions/approaches used to define, create, mature, and deploy a product definition across that span, including requirements management, model-based systems engineering, mechanical computer-aided design (MCAD), application lifecycle management (ALM), electronic design automation (EDA),

product data management (PDM), simulation and analysis, and maintenance-related applications. But what other solutions/data are industrial companies planning to link to their evolving digital thread? Our survey had a long list of applications, including Microsoft Office, enterprise resource planning (ERP), customer relationship management (CRM), and manufacturing execution systems (MES). Beyond commercial software, many companies also want to connect their all-important “in-house systems.” CIMdata believes that the growing importance of the digital thread is a significant opportunity for the PLM Economy.

In this PLM Market & Industry Forum presentation, CIMdata will present the results of interviews with solution providers and additional research on other PLM market leaders on this critical topic.

Key takeaways from this session include:

- Many solution and service providers in the PLM Economy already support the digital thread in their industrial clients.
- Their approaches reflect corporate and technology strategies, solution capabilities, and the role those solutions play in industrial PLM strategies.
- As part of CIMdata’s recent research into the digital thread, we gathered information from leading solution and service providers on the challenges they face in meeting this new requirement.
- The digital thread can be a big opportunity for the PLM Economy.

The 2023 PLM Market & Industry Forum is a live event in Ann Arbor, MI, USA, on March 30 and in Frankfurt, Germany, on April 4. A series of virtual-live events will follow, each held over two half-days designed to share the same information in the following geographies, India, China, and Japan.

Please let me know your thoughts on this topic by sharing them in the comments section of this blog!

Or contact me directly at s.przybylinski@CIMdata.com

[I hope to see you in Ann Arbor or Frankfurt!](#)

Stan

Acquisitions

Bentley Systems Announces Acquisition of EasyPower®, Leader in Power Systems Engineering Software

24 February 2023

Bentley Systems, Incorporated, the infrastructure engineering software company, today announced it has acquired EasyPower, a leading developer of design and analysis software tools, including arc flash solutions, for electrical engineering professionals. Since its founding in

1984, Portland, Oregon-based EasyPower has innovatively combined graphics-based modeling and analysis in order to make solving complex electrical engineering problems ever more straightforward and accessible. EasyPower products are primarily used for designing, analyzing, and monitoring power distribution systems serving industrial and commercial facilities, to ensure safety, reliability, and regulatory compliance.

Bentley's acquisition of EasyPower, to extend integrated and iterative power systems design and analysis for infrastructure digital twins of every type, broadens its comprehensiveness in infrastructure engineering. With an increasingly electrified future and with disparate and widely distributed energy resources on both sides of "the meter," all infrastructure assets will benefit – in performance, economics, safety and resilience – from continued simulation and assessment of power distribution conditions and designs over their project and operating lifecycles. Priorities for Bentley Systems will include integrating EasyPower's schema and digital workflows with Bentley's OpenBuildings, OpenFlows, OpenPlant, OpenRail, and Bentley Raceway and Cable Management applications.

CEO Greg Bentley said, "All infrastructure projects and assets have power distribution systems, which are too frequently analyzed using unnecessarily complicated software that is disconnected from 3D/4D BIM and digital twin workflows. By incorporating EasyPower within our design and modeling portfolio, and our iTwin Platform, we can help enable the distribution systems powering infrastructure to be more readily adapted to new imperatives for sustainability and resilience, while making electrical safety assurance more ubiquitous, accessible, and evergreen."

EasyPower CEO Kevin Bates said, "We are delighted to be joining Bentley Systems at this point of inflection for electrical power in infrastructure, and in infrastructure digital twins. For nearly 40 years, EasyPower has been simplifying complex electrical engineering problems and helping our customers to confidently complete the job at hand. Our purpose has been to make electricity more accessible, more reliable, and safer to use. Within and for Bentley Systems, we can now substantially scale up EasyPower's reach – across the world, across infrastructure sectors, and across digital twin lifecycles!"

The acquisition of EasyPower initially adds 45 expert colleagues in North America.

To learn more, visit www.easypower.com.

Company News

Accenture's Innovation in Insurance Awards Now Open for Applications

24 February 2023

Qorus and Accenture today launched the eighth edition of the Innovation in Insurance Awards, celebrating the best ideas and projects that are transforming the industry.

Established in 2016, the program provides a forum for organizations to share best practices and continues to bear witness to the evolution of insurance in a changing world. Last year, the awards attracted 398 submissions from 251 institutions in 44 countries.

Companies can submit their entries online until 6 April 2023 within the following seven categories:

Global Innovator (overall winner) – the most innovative insurer that displays innovation in their strategic direction, business practices and practical outputs. The winning organization is committed to continuous innovation and transformation, the development of a broad ecosystem of partners extending beyond insurance and the use of emerging technologies for improved customer experience and business performance. To qualify, the entrant must have submitted at least three innovations across the other six categories and be invited to apply.

Connected Ecosystems & Marketplaces – new business models and scalable end-to-end value propositions that capitalize on the power of partnerships, platforms, new technologies and insurtech. Submissions may be made by incumbents, specialized players and other new competitors.

Insurtech – reserved for the insurance start-ups, spin-offs and technology firms that are harnessing technology to reinvent the customer experience whilst driving new value for insurers. This category is for firms specifically targeting the insurance industry, with stage-one funding, a market release proposition and/or have completed a successful proof of concept in the market.

Product & Service Innovation – innovations that extend or replace the traditional insurance offering, creating new revenue pools through expansion into new and existing customer segments and markets.

Re-imagining the Customer Experience – innovations that enhance the way companies engage with new or existing customers via physical and/or digital channels, new customer management models, artificial intelligence-driven advice, and innovative management of customer loyalty and satisfaction.

Social, Sustainable & Responsible – advances in social purpose, and in the insurer's commitment to being a good corporate citizen and a true ally of its customers. This category covers the full definition of sustainability, from environmental and climate interventions and risk management to strategies relating to building communities and fostering inclusive insurance.

Workforce Transformation – bringing together people, culture, leadership, organization and technology, enabling the insurer to realize the full potential of the human and machine workplace.

Each entry will be assessed using three criteria: originality; long-term strategic impact and return on investment; as well as its ability to be applied on a broader scale in other markets and countries.

"Since the Awards' inception, we've highlighted the cutting-edge insurers and innovations that have set inspiring performance levels for others in the field," said John Berry, Qorus CEO. "As demonstrated through last year's program, the industry is continuously shifting to a consumer-centric model. We're confident that this year's awards will again showcase the exceptional

solutions that insurers are implementing, as they adapt to new lifestyles, reimagine their role, and drive industry reinvention.”

Silvia Milian, a managing director in Accenture’s Insurance industry group, said, “Over the past few years, we’ve seen a rise in entries focused on sustainability, connected ecosystems and the convergence of health and well-being, indicative of broader industry trends. Driving new innovations in products, distribution and process are critical for responding to rapid market shifts, as well as for building a sustainable and responsible insurance industry.”

Winners will be selected by a panel of judges comprising senior insurance executives from around the world, and an online vote by Qorus members and non-members from insurance institutions. The winners will be announced at an awards ceremony on 14 June 2023.

To find out more about the awards and how to submit an entry, visit innovationininsurance.qorusglobal.com

AECOM establishes Sustainable Legacies Centre of Excellence in Singapore

20 February 2023

AECOM, the world’s trusted infrastructure consulting firm, announced the establishment of the AECOM Sustainable Legacies Centre of Excellence (CoE) in Singapore. The CoE will serve as a hub for innovation, training, and thought leadership that will further enhance the sustainable engineering skills of AECOM’s Singapore employees. The Centre will benefit from insights derived from AECOM’s *Sustainable Legacies* strategy, which seeks to embed ESG principles across the work the Company delivers for its clients around the world.

“Singapore has risen rapidly as a global leader in sustainable development thanks to exceptional talent and the city nation’s bold approach to addressing environmental issues. We’re proud to continue to partner with the Singapore Economic Development Board, or EDB, to deepen Singapore’s extensive expertise in this growing field,” said Lara Poloni, AECOM’s president. “The Centre presents a promising partnership opportunity, one that will build on our leading environmental, sustainability and resilience capabilities as we drive forward our Sustainable Legacies strategy, and Singapore’s own Green Plan 2030.”

The CoE comprises three components:

- **Sustainable Legacies Academy:** Employees will undergo structured training programmes and technical workshops conducted by AECOM’s global ESG experts
- **ESG Project Management:** Employees will be given secondment opportunities to AECOM’s global offices to contribute to key sustainability projects
- **Thought Leadership:** AECOM will organise regular industry forums to promote sustainability efforts in Singapore

Through the CoE, AECOM aims to train more than 100 employees for sustainability roles over the next three years to support the growing pipeline of sustainability projects in Singapore and the region.

“As cities and industries accelerate their green plans, the demand for sustainability talent, especially in the engineering field, will continue to grow. We are heartened that through AECOM’s Centre of Excellence, Singaporeans will get more opportunities to reskill or upskill to take on new and exciting sustainability roles,” said Jacqueline Poh, Managing Director of EDB. “We believe the Centre’s work will create a spillover effect which will benefit Singapore, AECOM and the region, and look forward to a continued strong partnership with AECOM to create new sustainable solutions in infrastructure development.”

The CoE aligns with the Singapore Green Plan 2030, which charts ambitious and concrete targets in support of the UN’s 2030 Sustainable Development Agenda and Paris Agreement, as well as Singapore’s goal of achieving net zero emissions by 2050.

Altium Korea Office Officially Opens

23 February 2023

Altium is excited to announce the opening of its new regional office in Seoul, Korea. Altium recognizes considerable potential in Korea and would like to serve customers better, shorten the feedback loop, and address the specific needs of the Korean market. Korean customers will experience improved service, competitive pricing, and product enhancements. This is an important step forward for Altium as it continues to grow and expand its direct reach into new markets.

“Altium has been operating in Korea for over five years, forming strong customer relationships in multiple segments, such as Consumer Electronics, Industrial Automation, and Automotive Engineering, as well as with various Korean Government Agencies. Establishing a dedicated team covering all aspects of customer engagement from Pre-Sales to Sales & Marketing and Customer Support will allow Altium to better address local market needs in Korea.”

- Pelle Chiari, Director, Altium Korea Software Ltd.

The Korean market, ranking third in the global market for electronics production, is viewed as a key driver to Altium's growth over the next five years. This expansion is expected to help Altium grow its Korean market presence by providing faster and more efficient support to existing customers and more personal outreach to new customers supporting continuous innovation by companies in Korea. The local office opening is part of the company’s overall goal of delivering outstanding customer service and competitive pricing within the country.

CAPGEMINI GOVERNMENT SOLUTIONS APPOINTS BILL WEBNER AS CEO

24 February 2023

Capgemini Government Solutions LLC, an independent Capgemini subsidiary working with U.S. Government Agencies, today named Bill Webner as Chief Executive Officer. Webner’s appointment is a result of the firm’s succession plan, initiated by outgoing CEO Doug Lane’s recently announced retirement.

“Bill has a strong track record in the government consulting space, with deep roots in technology as well as in the public sector itself. He’s helped our clients achieve measurable

success within the agencies they serve and his vision and plan to accelerate Capgemini's growth in the market gives us confidence about our clients' future as well as our own," said Jim Bailey, CEO Americas at Capgemini.

Since joining Capgemini Government Solutions as a Vice President in 2014, Webner has served in several leadership roles across the company and led Capgemini's organic and inorganic expansion in the Federal market.

"I'm excited to take on this new role and continue Capgemini's journey of unlocking transformational value for our people and our clients," said Bill Webner. "As a strategic partner to our clients and global provider of world-class business and technology solutions, Capgemini's potential in the Federal market is limitless."

Webner holds a Bachelor of Arts from North Carolina State University, a Masters in Liberal Arts from St. John's College and a Masters of Business Administration from The George Washington University. Prior to joining Capgemini in 2014, he was a leader in Booz Allen Hamilton's federal business. He started his career as an analyst at Freddie Mac.

IFS marks 25th anniversary of the inception of its operations in Sri Lanka as it sees continued success in technology excellence

24 February 2023

IFS, the global cloud enterprise software company, announced today that it is celebrating the 25th anniversary of the inception of its Sri Lankan operations. Since 1997, IFS has made major investments into the workforce and community, becoming the second largest technology employer in the country.

At a time when Sri Lanka's ICT industry was developing, IFS saw an opportunity to set up its innovation hub in the Asian region due to the country's excellent technology talent.

Today, IFS Sri Lanka is a powerhouse in the local ICT industry, with more than 2,200 employees, accounting for approximately 40% of IFS's global staff.

IFS Chief Executive Officer Darren Roos commented: "It goes without saying that our Sri Lankan team has played a critical role in providing us with the organizational support and agility we needed to achieve the growth that we have."

Roos continued: "The team's contribution to our success and company culture is felt throughout the organization because it supports so many of IFS's working processes from R&D to HR, Marketing, Support and more. I am very proud of what we have achieved together and of the contribution that we are making as the second largest employer and with the IFS Foundation," Roos added: "25 years is a very significant journey that we look forward to progressing as we also continue to invest in our business here."

"Over the past five years, our employee base in Sri Lanka has almost tripled since 2017 to over 2,200." Concluded Roos

IFS Sri Lanka has strong business units overseeing the most extensive R&D center outside of Sweden in addition to Finance, Procurement, Marketing, Global Customer Support, Cloud Operations, Consulting, IFS Labs, and South Asia Customer Organization.

IFS Executive Vice President & Chief Operating Officer Ranil Rajapakse, who is also one of the original IFS Sri Lanka employees, commented: “It is a surreal moment to reflect upon our humble start with 26 people in our Colombo office and compare it to where we are now. 25 years ago, IFS was virtually unknown in Sri Lanka, but today people recognize it as a well-respected technology big-hitter and a force to be reckoned with in the industry.”

“It has been a rich and rewarding experience to witness the company’s ascent and transformation over the last 25 years. Especially seeing the extensive growth of our employee network entering IFS as graduates, I am honored to work alongside such an intelligent, hardworking, and driven team of professionals. I cannot wait to see what the next 25 years bring for IFS Sri Lanka,” concluded Rajapakse.

Infosys Appoints Shaji Mathew as Group Head of Human Resources

17 February 2023

Infosys, a global leader in next-generation digital services and consulting, announced the appointment of **Shaji Mathew as Group Head of Human Resources** effective March 22, 2023. Shaji will be taking over from Krish Shankar who retires on March 21, 2023, after serving in this role since 2015.

Based on the recommendations of the Audit Committee and the Nomination and Remuneration Committee, the Board also designated Shaji Mathew as an executive officer for the purpose of reporting under the rules of Securities and Exchange Commission and Key Managerial Personnel as defined under IndAS 24- Related Party Disclosures.

In his current role, Shaji is Infosys’ global head of delivery for Financial Services, Insurance, Healthcare and Life Sciences. He has also been actively steering the company’s efforts to create a more inclusive workforce as the Chair for Diversity, Equity, and Inclusion (DEI) in India. Shaji is a rank holder from National Institute of Technology, Calicut and has completed a Global Leadership Program from Stanford University Graduate School of Business. He has served as the Chairman of Confederation of Indian Industry at the zonal level.

Commenting on the appointment, **Salil Parekh, CEO & MD, Infosys** said, “We are delighted to announce that Shaji will take over as Group Head of Human Resources. Shaji has been with Infosys for over thirty years. With his in-depth knowledge of our company as well as vast leadership experience, we are confident that he will steer our Human Resources function for continued success. We would like to express our deep appreciation for Krish Shankar for building a robust Human Resources organization that further strengthened Infosys’ position as a preferred employer globally.”

During his tenure at Infosys, Krish has led the development of a strong employee value proposition, helped build a digital skills-based ecosystem and enabled digital career paths for employees. Krish was also integral to effectively managing the workforce and seamless business

continuity during, and after the pandemic, while maintaining an unwavering focus on employee well-being.

Medidata Bolsters Senior Leadership Team to Further Accelerate the Digital Transformation of Life Sciences with Unmatched End-to-End Solutions

21 February 2023

Medidata, a Dassault Systèmes company, announced a new leadership structure designed to fuel its mission of creating end-to-end solutions that power smarter treatments and healthier people. The strategic evolution is an opportunity to further long-term goals and growth to enhance customers' ability to unlock greater value across the Dassault Systèmes portfolio, ultimately taking drug development to new heights.

Pascal Daloz, an accomplished leader at Dassault Systèmes, was named CEO of Medidata. Daloz played a key role in the success of the acquisition of Medidata in 2019, and his proven success as a business leader and visionary are a great complement to Medidata.

Michael Pray was named company COO. In his prior role as Medidata chief commercial officer, he was instrumental in the rapid growth of the company, which includes more than doubling total revenue to over \$1B and 100 percent growth in number of customers during the last six years. Pray will lead the day-to-day operations at Medidata, and will work closely with Daloz to build a complete solution set serving the life sciences industry at large.

“Customers are asking to do more with Medidata, and we are evolving to meet their digital transformation needs,” said Pascal Daloz, Medidata CEO. “Building on the strong foundation that has been set over the last twenty years, we will continue to pioneer unmatched solutions across the life sciences lifecycle. We are extremely committed to this industry and will continue investing to achieve the vision that includes prevention to precision medicine and discovery to distribution, in order to be at the center of every patient journey.”

Medidata is a wholly owned subsidiary of Dassault Systèmes, which with its 3DEXPERIENCE platform is positioned to lead the digital transformation of life sciences in the age of personalized medicine with the first end-to-end scientific and business platform, from research to commercialization.

Philadelphia High School Receives Donation to Develop Advanced Manufacturing Program

24 February 2023

Mastercam, the world's #1 CAM software, and Andrew Crowe, influential manufacturing leader and speaker to the White House and Pentagon, will present Benjamin Franklin High School with software, equipment, and vision to establish an advanced manufacturing program. This donation will enable students to acquire the advanced training required to enter the manufacturing field after graduating high school.

On Monday, February 27, Andrew Crowe, often referred to as the leader of the New American Manufacturing Renaissance, will share his vision with students at the Benjamin Franklin High

School, to connect them to the opportunities available in a career in advanced manufacturing. Mastercam will provide the school with Mastercam software, training resources, and equipment to help the students develop advanced manufacturing skills they can use to build a successful future.

The National Association of Manufacturers estimates that 2.1 million jobs may go unfilled by 2030 due to a lack of skilled manufacturing workforce. Additionally, a career as a machinist in Philadelphia earns an average \$52,000 annually (Intuit). The vision of Mr. Crowe and the resources provided by Mastercam will enable the students at Benjamin Franklin High School to fill this manufacturing skills gap in the years to come.

“Andrew Crowe will help the students understand the infinite number of opportunities to work as machinists, engineers, designers, and more by learning to use the valuable tools now available at Benjamin Franklin High School,” said Laura Hood, Chief Administrative Officer at Mastercam. “Helping Benjamin Franklin develop this advanced manufacturing program means we will help inspire the next generation of makers and innovators to seek a career in manufacturing.”

Procore Appoints Sarah Hodges as Chief Marketing Officer

21 February 2023

Procore Technologies, Inc., a leading global provider of construction management software, announced Sarah Hodges as chief marketing officer (CMO), effective today. As CMO of Procore, Hodges will be responsible for the development of the strategic marketing plan and execution of all marketing activities globally in support of Procore’s financial and strategic business objectives.

“Sarah is a highly-experienced, talented marketing leader with a proven track record of building and expanding global SaaS brands, and we are thrilled to have her join Procore as our CMO,” said Tooley Courtemanche, Procore founder, president and CEO. “As an established industry thought leader and advocate for women in construction, her customer-centric approach to marketing and ability to lead and inspire teams make her the ideal fit for this role.”

Hodges joins Procore after several leadership positions at Autodesk, including leading strategy and marketing for the construction business line and product management for the media and entertainment business line. With more than 20 years of experience at global SaaS companies, Hodges brings deep expertise driving go-to-market strategies, managing business performance and leading cross-functional teams.

“Procore is transforming the construction industry, and I’m excited to elevate Procore’s vision of improving the lives of everyone in construction,” said Hodges. “Procore's potential is unlimited, and I look forward to working with the team to build the brand's momentum globally.”

Based in Boston, Hodges holds a joint marketing and communications business degree from Northeastern University. She is passionate about inspiring females and plays an active role as a Board Overseer for the Boston Children’s Museum.

PROLIM Launches “Digital Innovation Center” at Hubballi, India

16 February 2023

PROLIM announced the opening of “Digital Innovation Center (DIC)” to bring business strategy and cutting-edge technology to build “Digital Transformation” platform and solutions.

Located on PROLIM Campus at Aryabhata Technology Park in Hubballi, the Digital Innovation Center includes multi-domain Software Engineers, Architects, Application Engineers, Cloud Experts to build 3 verticals: Mendix Factory, PLM Factory and Cloud Factory – a set of tools, accelerators, apps and services that enable and accelerate customers to migrate to Cloud.

PROLIM, a global leader in PLM, IT, IoT Solution provider, has evolved since it was founded in 2005. PROLIM has been helping organisations accomplish their business goals with strong Technology and R&D capabilities and has bagged several awards and recognitions. The company has been focused on product innovation by leveraging IT, IoT and PLM technologies.

“Being a global Siemens Digital Industries Platinum Partner, PROLIM experts will build Digital solutions on top of Siemens Xcelerator portfolio that includes software products Solid Edge, NX, Teamcenter, Siemens EDA and Mendix. As an AWS Select Consulting Partner and demonstrated expertise in AWS cloud, we will be leveraging AWS Migration Acceleration Program (MAP) capabilities to help our customers to accelerate their Digital Transformation” says, Prabhu Patil, Founder and CEO of PROLIM.

With this Innovation Center in Hubballi, PROLIM is ready to make and build innovative Apps on Mendix, accelerators for Teamcenter, Cloud Factory and best-in-class consulting and implementation services, to help customers derive more business value from their investments.

PTC Extends Executive Agreement With CEO James Heppelmann

20 February 2023

PTC announced that it has extended the term of the executive agreement with Chief Executive Officer James (“Jim”) Heppelmann for an additional three years through the company’s fiscal year 2026. In parallel, Michael (“Mike”) DiTullio, President of PTC’s Digital Thread group, has been promoted to company President and Chief Operating Officer. In this expanded role, Mr. DiTullio will oversee product development, sales and marketing, customer success, strategy, and IT across both the Digital Thread and Velocity groups. Mr. DiTullio will continue to report to Mr. Heppelmann.

“Over the last 12 years under Jim’s visionary leadership, PTC has evolved and transformed by establishing category leadership in the product lifecycle management (PLM) market, broadening and deepening its industry-leading technology portfolio, transitioning to a subscription business model, and pioneering the SaaS transformation of our industry,” said Bob Schechter, Chairman of PTC’s Board of Directors. “This incredible transformation significantly accelerated top-line growth while dramatically increasing profitability, resulting in a 6-fold

expansion in enterprise value. We look forward to Jim's continued leadership of PTC as the company continues its SaaS transformation and pursues its vision for closed-loop PLM."

"I'm glad to have Mike at my side as we continue pursuing our initiatives focused on delivering customer value and further accelerating growth and expanding profitability," said Jim Heppelmann. "Mike has been one of PTC's top executives for many years and has been a close partner to me every step of the way as we have transformed the company into what it is today. Mike is respected across the company and industry due to his experience leading global sales and both the Velocity and Digital Thread groups. I congratulate Mike and look forward to working with him in this expanded role."

"For more than 25 years, I've had the privilege of contributing to PTC's success, and as proud as I am of where the company is today, I'm even more optimistic about what lies ahead," said Mike DiTullio. "From our ongoing SaaS transformation to the addition of ServiceMax to enable us to realize closed-loop PLM, PTC has never been in a better position to deliver compelling solutions and support our customers."

Revolution in Simulation Welcomes Neural Concept as Newest Sponsor

21 February 2023

The global simulation industry collaboration and technology alliance *Revolution in Simulation*, created to accelerate innovation through cutting edge simulation, announces Neural Concept as its newest sponsor and collaborator.

Neural Concept creates AI Deep Learning algorithms for industrial engineering. By accelerating R&D cycles, augmenting product performance, and solving engineering challenges, Neural Concept is revolutionizing product design.

"OEMs and Tier 1 in the automotive, aerospace and energy industries face heavy challenges (environmental regulations, pressure on the supply chain, time to market, cost). For this reason, they are all considering enhancing their current production workflow," explained Pierre Baqué, Founder & CEO. "Neural Concept developed the first 3D Deep Learning software specifically tailored to Computer Aided Design. The solution allows engineers to extract maximum value from simulation data, allowing them to explore an infinite number of designs and to automatically optimize industrial components given a set of performance goals without calling back the expensive simulator. It means that they can test 1000x more designs while cutting cost and development time. Thus, the mission of Revolution in Simulation is deeply connected to ours and we are delighted to share further our transformative technology together."

Rev-Sim Director of Partnerships, Mike Nieburg said, "The demand for broader simulation usage is exploding and each of our sponsors are working to advance and expand the use and value of engineering simulation software by innovating within their market spaces. We are excited to have Neural Concept join us demonstrating their revolutionary thought-leadership and technology in a collaborative alliance that benefits all industrial users of engineering simulation."

Neural Concept adds its name to a list of participating sponsors that includes Ansys, Aras, BETA CAE, Coreform, Dassault SolidWorks, Digital Engineering Magazine, EASA, ESRD, Future Facilities, Hexagon/MSC, Kinetic Vision, NAFEMS, Digital nTopology, Ohio Supercomputer Center, OnScale, PASS Suite, PTC, Siemens, SimScale, SimuTech Group, UberCloud, and VCollab.

Sandvik announces changes to the Group Executive Management

21 February 2023

Sandvik has appointed Sofia Sirvell as Chief Digital Officer (CDO) for the Sandvik Group and new member of the Group Executive Management as of March 1, 2023. Sofia Sirvell, born in 1974, is currently Sandvik Group Chief Information Officer (CIO), a position she has held since 2021. Prior to joining Sandvik, she was the Deputy CTO at H&M Group, where she had a leading role in the fashion company's digital transformation.

In the CDO role, she will continue the digital transformation of Sandvik and support collaboration across the Group to enhance digital capabilities and IT. Sofia Sirvell will continue to lead the global Group IT organization and report to Stefan Widing, CEO and President of Sandvik.

"There is a strong strategic focus to deliver on the digital transformation of Sandvik, which entails both developing our digital customer offering and strengthening the digital capabilities across Sandvik. The global support function for IT plays a key role in driving this shift. The addition of Sofia Sirvell to the Group Executive Management is a natural and positive step, and I am confident that she with her competence will contribute in an excellent way to the team," says Stefan Widing.

Additionally, Jessica Alm, Executive Vice President and Head of Group Communications and Sustainability, has decided to leave Sandvik to become the Chief Communications Officer at Essity. Jessica Alm joined Sandvik in 2006. She has been in her current position and a member of the Group Executive Management since 2013. She will leave Sandvik no later than August, 2023. The process to find a successor will now be initiated.

"Jessica Alm has made a big contribution to Sandvik during her years in the company, shaping our communications organization with her strong leadership and competence. She has been a highly appreciated colleague and I wish her all the best for the future as she now moves on to a new challenge," says Stefan Widing.

Synopsys Study Underscores Need for Comprehensive SBOM as Best Defense in Software Supply Chain Security Efforts

23 February 2023

Synopsys, Inc. today released the eighth edition of the Open Source Security and Risk Analysis (OSSRA) report. Produced by the Synopsys Cybersecurity Research Center (CyRC), the 2023 OSSRA report examines the results of more than 1,700 audits of commercial and proprietary codebases involved in merger and acquisition transactions and highlights trends in open source usage across 17 industries.

The findings of the 2023 OSSRA report deliver an in-depth look at the current state of open source security, compliance, licensing, and code quality risks in commercial software with the goal of helping security, legal, risk, and development teams better understand the open source security and license risk landscape. This year's findings revealed an overwhelming majority of codebases (84%) contain at least one known open source vulnerability, a nearly 4% increase from last year.

The first step toward reducing business risk from open source, proprietary, and commercial code involves a comprehensive inventory of all software a business uses, regardless of where it comes from or how it's acquired. Only with this complete inventory – a Software Bill of Materials (SBOM) – can organizations establish a strategy to address risk stemming from new security disclosures like Log4Shell.

"The 2023 OSSRA report findings underscore the reality of open source as the underlying foundation of most types of software built today," said Jason Schmitt, general manager of the Synopsys Software Integrity Group. "An increase in the average number of open source components rising 13% (from 528 to 595) in this year's audits further reinforces the importance of implementing a comprehensive SBOM that lists all open source components in your applications as well as their licenses, versions, and patch status. This is a foundational strategy towards understanding and reducing business risk by defending against software supply chain attacks."

Key findings from the 2023 OSSRA report include:

- A five-year overview of OSSRA data shows dramatic growth in open source use: The global pandemic contributed to the EdTech sector's adoption of open source, which grew by 163%, with educational courses and instructor/student interactions increasingly pushed online. Other sectors experiencing a large spike in open source growth include the Aerospace, Aviation, Automotive, Transportation and Logistics sector with a 97% increase and 74% growth in Manufacturing and Robotics.
- High-risk vulnerabilities over the past five years have also increased at an alarming rate: Since 2019, high-risk vulnerabilities in the Retail and eCommerce sector jumped by 557%. Comparatively, the Internet of Things (IoT) sector, with 89% of the total code being open source, saw a 130% increase in high-risk vulnerabilities in the same period. Similarly, the Aerospace, Aviation, Automotive, Transportation and Logistics vertical was found to have a 232% increase in high-risk vulnerabilities.
- Use of open source components with no licenses puts organizations at greater risk of violating copyright law than those using licensed components: The report found that 31% of codebases are using open source with no discernable license or with customized licenses. This is a 55% increase from last year's OSSRA report. The lack of a license associated with open source code, or a variant of another open source license, may place undesirable requirements on the licensee and will often require legal evaluation for possible IP issues or other legal implications.

- Available code quality and security patches are not applied to a majority of codebases: Of the 1,480 audited codebases that included risk assessments, 91% contained outdated versions of open source components. Unless an organization keeps an accurate and up to date SBOM, an outdated component can be forgotten until it becomes vulnerable to a high-risk exploit.

"The key to managing open source risk at the speed of modern development is maintaining complete visibility of application contents," said Mike McGuire, senior software solutions manager within the Synopsys Software Integrity Group. "By building this visibility into the application lifecycle, businesses can arm themselves with the information needed to make informed, timely decisions regarding risk resolution. Organizations leveraging any type of third-party software should rightfully assume that it contains open source. Verifying this, and staying on top of the associated risk, is as simple as obtaining an SBOM – something easily provided by a vendor taking the necessary steps to secure their software supply chain."

To learn more about the 2023 OSSRA findings, download a copy of the report, read the blog post, or register for the March 23rd webinar.

Tecsys Appoints Shannon Karl as Chief Marketing Officer

21 February 2023

Tecsys Inc., an industry-leading supply chain management and omnichannel commerce software company, announced marketing veteran Shannon Karl has joined the company as Chief Marketing Officer. Karl brings over 25 years of executive marketing experience developing and executing strategic B2B marketing, communications and demand generation plans for enterprise SaaS solutions.

In her new role, Karl will execute Tecsys' verticalized go-to-market strategy, leading the organization's global marketing initiatives across all aspects of product marketing, demand generation, partner marketing and corporate communications.

"I am thrilled to join Tecsys and help drive this next chapter of growth for the organization," says Karl. "Tecsys has an impressive legacy of solving real business problems through customer-driven innovation, and my goal is to build on this strong foundation to scale and expand our position in the market. I look forward to working with the team to bring our customers the best possible tools to run their supply chains."

Shannon comes to Tecsys from Intellex, where she served as CMO. Prior to Intellex, she was vice president of Industry Marketing at SAP where she built the company's first Global Integrated Demand Team dedicated to supporting Enterprise and Mid-Market sectors, and led SAP Applications marketing for North America, inclusive of SAP S/4HANA, Cloud ERP, SuccessFactors and the Finance line of business. She has likewise held various global and regional marketing leadership roles at IBM and PwC Consulting.

"Shannon is an excellent addition to our top-notch leadership team. Her extensive experience in the enterprise software industry and passion for customer-driven solutions make her the perfect fit for our organization," says Peter Brereton, president and CEO of Tecsys. "I look

forward to the positive impact she will have as she evolves our marketing efforts for accelerated growth and success.”

Trimble Partners with Engineers Without Borders USA to Support Climate Resiliency and Education Efforts

23 February 2023

Trimble and the Trimble Foundation announced today continued support for Engineers Without Borders USA (EWB-USA). The Foundation grant focuses on EWB-USA’s climate resiliency projects and advancing its Science, Technology, Engineering and Math (STEM) education initiatives. The grant also extends support to EWB Student Chapters at universities with Trimble Technology Labs. The collaboration expands Trimble’s ongoing support of EWB-USA’s mission to develop engineering projects to build a better world.

Trimble and EWB-USA share a belief on the importance of addressing the long-term impacts of climate change on critical infrastructure as well as STEM education in underserved communities across the globe. This includes a sponsorship of EWB-USA’s global portfolio of projects, centered on providing communities with resources and solutions in areas such as housing and improved building materials; infrastructure for heating and cooling; and water supply systems.

“Climate change has a profound impact on our world’s infrastructure and requires us to not only adapt how we design and build but how we educate future engineers,” said Boris Martin, president, EWB USA. “We look forward to continuing to partner with Trimble to create a world where every leader is equipped to build and every community is built to thrive.”

Trimble’s support for EWB-USA includes a commitment to build a robust STEM workforce by providing the next generation of engineers with multi-year, service-learning opportunities through a new project grant impact program. EWB-USA works with 170 student chapters housed within colleges and universities across the U.S. to enhance engineering education through unique skill building opportunities and apprenticeship style peer-to-peer exchange. The student-chapter grants will directly support University projects within institutions with established EWB chapters and Trimble Technology Labs. The combination provides a unique opportunity for climate resiliency work by empowering the next generation to deliver impactful projects worldwide.

“EWB-USA and Trimble share a dedication to building stronger communities throughout the world,” said Emily Saunoi-Sandgren, chair, Trimble Foundation. “We are inspired by their work to prepare thousands of globally-responsible engineers to deliver critical infrastructure that can improve the lives of the most vulnerable and drive a sustainable future.”

Events

Synopsys to Present at Upcoming Investor Events

24 February 2023

Synopsys, Inc. today announced the following presentations for the investment community.

Morgan Stanley Technology, Media & Telecom Conference

Tuesday, March 7 at 9:50 a.m. PT / 12:50 p.m. ET
Aart de Geus, Synopsys Chair and CEO

KeyBanc Emerging Technology Summit

Wednesday, March 8 at 9:00 a.m. PT / 12:00 p.m. ET
Shelagh Glaser, Synopsys CFO

There will be a live audio webcast and a replay will be available following the live event. Both live webcast and replay can be accessed via the Synopsys corporate website at <https://investor.synopsys.com/overview/default.aspx>

Financial News

Capgemini delivers another record performance in 2022

The Board of Directors of Capgemini SE, chaired by Paul Hermelin, convened on February 20 in Paris to review and adopt the accounts of the Capgemini Group for the year-ended December 31, 2022.

Aiman Ezzat, Chief Executive Officer of the Capgemini Group, said: *“This is another record year for our Group, with 16.6% constant currency growth and 13.0% operating margin*. We ended 2022 with good momentum despite a less favorable economic environment. Therefore, we enter 2023 on a solid footing.*

This excellent performance is the result of our increased client intimacy and the remarkable commitment of our 360,000 team members.

In 2022, we accelerated our investments in innovation, in digital & cloud and in our sustainability services. We also reinforced our attractiveness to recruit the best talents.

As part of our ESG commitments, the average number of training hours per employee increased by 12% this year and the carbon footprint per employee was 46% lower than in 2019.

The Group’s transformation over the past few years enables us to be recognized as a business and technology partner by our clients across their entire value chain. The Group is now positioned as a major strategic player in this dual transition towards a digital and sustainable world.

I am confident in our ability to further strengthen our position with clients and expand our market share.”

KEY FIGURES

<i>(in millions of euros)</i>	2021	2022	Change
Revenues	18,160	21,995	+21.1%

Operating margin *	2,340	2,867	+22%
<i>as a % of revenues</i>	<i>12.9%</i>	<i>13.0%</i>	<i>+10 basis points</i>
Operating profit	1,839	2,393	+30%
<i>as a % of revenues</i>	<i>10.1%</i>	<i>10.9%</i>	
Net profit (Group share)	1,157	1,547	+34%
Basic earnings per share (€)	6.87	9.09	+32%
Normalized earnings per share (€)*	9.19 ^a	11.52 ^a	+25%
Organic free cash flow *	1,873	1,852	
Net cash / (Net debt) *	(3,224)	(2,566)	

^a Excluding a transitional tax expense of €73 million in 2022, compared to €36 million in 2021.

Capgemini recorded another year of strong growth, with results exceeding or in line with 2022 financial targets.

In a macroeconomic environment affected by the war in Ukraine, inflationary pressures and rising interest rates, the Group is benefiting from the structural demand from large corporations and organizations for digital transformation projects covering an increasing scope of their value chain, particularly in the Intelligent Industry and Customer First areas.

Continued momentum in Cloud and Data reflects the priority given by Group clients to their investments in technology. These investments are increasingly made as part of high added-value strategic projects requiring strong industry expertise.

The Group reported **revenues** of €21,995 million in 2022, up +21.1% vs. 2021 published figures. Constant currency growth* was +16.6%, above the 2022 target range of +14% to +15%, which was revised upwards on the publication of the half-year results. As acquisitions contributed

+1.3 points to growth, organic growth* (i.e. excluding the impact of currency fluctuations and changes in Group scope) reached +15.3%.

Despite a more demanding economic environment, momentum exceeded expectations in Q4, with constant currency growth of +14.0% and organic growth of +12.8%.

Bookings totaled €23,719 million in 2022, a year-on-year increase of +16.8% at constant exchange rates, representing a book-to-bill ratio for the year of 1.08. In Q4, bookings rose +11.4% at constant exchange rates to reach €6,685 million, corresponding to a book-to-bill ratio of 1.16.

The **operating margin*** increased by +22% to €2,867 million, representing 13.0% of revenues, compared with 12.9% in 2021. This 10-basis point improvement is consistent with the 2022 target of an increase of 0 to 20 basis points. A shift in the project mix, towards more innovative and value creating offers, more than offset the post-pandemic return of some operating costs – such as travel and facilities costs – and the higher cost of developing Group talent.

Other operating income and expense is a net expense of €474 million, down from €501 million in 2021.

Capgemini's **operating profit** is therefore up +30% at €2,393 million, or 10.9% of revenues.

The **financial expense** is €129 million, compared with €159 million in 2021.

The **income tax** expense is €710 million compared with €526 million last year. It includes €73 million due to the transitional impact of the 2017 US tax reform, compared with €36 million in 2021. Adjusted for exceptional items, the effective tax rate is down slightly at 28.1%, compared with 29.2% in 2021.

Net profit (Group share) is therefore up by +34% year-on-year to €1,547 million, while **basic earnings per share** increased by +32% to €9.09. **Normalized earnings per share*** is €11.09. Normalized earnings per share adjusted for the transitional tax expense is €11.52, up +25% year-on-year.

Organic free cash flow* is above €1,700 million, as targeted for 2022, and reaches €1,852 million.

In 2022, Capgemini invested €204 million in acquisitions. The Group also paid dividends of €409 million (€2.40 per share) and allocated €811 million (net) to share buyback programs. Finally, the 9th employee share ownership plan – which proved highly successful and thus contributed to maintaining employee shareholding above 8% of the share capital – led to a gross capital increase of €508 million.

The Board of Directors has decided to recommend the payment of a dividend of €3.25 per share at the Shareholders' Meeting of May 16, 2023. The corresponding payout ratio is 35% of net profit (Group share), in line with the Group's distribution policy.

OPERATIONS BY REGION

Change in revenues at constant exchange rates

	Q4 2022	FY 2022
North America	+12.3%	+15.0%
United Kingdom and Ireland	+15.3%	+19.4%
France	+11.9%	+12.5%
Rest of Europe	+15.2%	+16.1%
Asia-Pacific and Latin America	+19.6%	+30.6%
TOTAL	+14.0%	+16.6%

- **For the full year:**

All Group regions posted double-digit growth at constant exchange rates in 2022, driven by strong underlying momentum visible across almost all sectors.

Revenues in **North America** (31% of Group revenues) grew by +15.0%, driven by strong momentum in the Financial Services, TMT (Telecoms, Media and Technology) and Manufacturing sectors. The operating margin rate remained virtually stable at 15.6%, compared to 15.9% in 2021.

The **United Kingdom and Ireland** region (12% of Group revenues) recorded another year of strong growth, with revenues up +19.4%. The Public Sector was once again very dynamic, as were the Consumer Goods and Energy & Utilities sectors. The operating margin held at a record level of 18.0%, as achieved in 2021.

France (19% of Group revenues) revenues were up +12.5%, primarily fueled by the Manufacturing sector and, to a lesser extent, the Consumer Goods sector. The operating margin increased by 190 basis points year-on-year to 12.1%.

The **Rest of Europe** region (29% of Group revenues) grew +16.1%, with the Manufacturing and Consumer Goods sectors as the top contributors. The operating margin contracted slightly to 11.6% from 12.3% a year earlier.

Finally, revenues in the **Asia-Pacific and Latin America** region (9% of Group revenues) increased sharply by +30.6%, boosted by 2021 Group acquisitions in the region and solid underlying

organic momentum in the Financial Services and Manufacturing sectors. The operating margin was 10.6% compared with 11.5% in 2021.

- **Q4 2022:**

Growth rates exceeded expectations in the final months of the year while, as expected, they slowed slightly on levels observed since the beginning of the year. This momentum was visible in all Group regions as well as the main Group sectors.

OPERATIONS BY BUSINESS

Change in total revenues* at constant exchange rates

	Q4 2022	FY 2022
Strategy & Transformation	+25.4%	+28.2%
Applications & Technology	+14.4%	+18.0%
Operations & Engineering	+13.0%	+13.4%

- **For the full year:**

All Group business lines also reported double-digit growth rates in 2022 at constant exchange rates.

Strategy & Transformation consulting services (8% of Group revenues) reported a +28.2% rise in total revenues, showcasing the Group's ability to support clients' strategic projects.

Applications & Technology services (63% of Group revenues and Capgemini's core business) reported an +18.0% increase in total revenues, driven by digital transformation demand from large corporations and organizations across a growing share of their value chain.

Finally, **Operations & Engineering** total revenues (29% of Group revenues) grew +13.4%, primarily driven by robust momentum in Engineering services and supported by solid growth in Infrastructure and Cloud services.

- **Q4 2022:**

All Group business lines reported stronger than expected growth in Q4, although slightly lower than in previous quarters. **Strategy & Transformation** services and **Applications & Technology** services reported growth at constant exchange rates of +25.4% and +14.4%, respectively. **Operations & Engineering** services revenues grew +13.0% at constant exchange rates.

HEADCOUNT

At December 31, 2022, the Group's total headcount stood at 359,600. This 11% increase year-on-year, in a skilled labor market that remained tight throughout 2022, demonstrates Capgemini's ability to attract talent to fuel its growth.

210,300 employees work in offshore centers, some 58.5% of the total headcount, up +0.5 points vs. December 2021.

BALANCE SHEET

Capgemini's balance sheet structure changed little in 2022.

At December 31, 2022, the Group had cash and cash equivalents and cash management assets of €4.2 billion. After accounting for borrowings of €6.8 billion and derivative instruments, Group net debt* is €2.6 billion at December 31, 2022, down compared with €3.2 billion at December 31, 2021.

CORPORATE SUSTAINABILITY

In line with the commitments of its [ESG \(Environment, Social and Governance\) Policy](#) presented in December 2021, Capgemini achieved significant progress during the year in terms of corporate sustainability.

Firstly, in 2022 the Group strengthened its position as a leader committed to fostering diversity and inclusion. Regarding gender diversity in particular, the proportion of women in the Group's global workforce rose by over 2 points for the second year running, making the Group one of the fastest improving companies in its sector: the proportion of women in the total workforce reached 37.8% at the end of 2022 compared with 35.8% a year earlier, and 24.4% among the Group's executive leaders compared with 22.4% at the end of 2021. Capgemini was also awarded global EDGEplus certification by the EDGE (Economic Dividends for Gender Equality) Certified Foundation, in recognition of the Group's commitment to intersectional equity in all its dimensions.

In human capital development, the Group provided 17.4 million training hours to employees in 2022, compared with 12.8 million in 2021. This represents a 12% increase in the average number of training hours per employee, well above the Group's commitment to an annual 5% increase. In addition, since 2018, 1.9 million individuals have now benefited from Capgemini's many digital inclusion initiatives, of which over 1 million in 2022 alone.

Regarding environmental sustainability, Capgemini was one of the first companies globally to have its "net zero emissions" targets validated according to the new tighter SBTi (Science-Based Targets initiative) net-zero standard published at the end of 2021. The Group has set more ambitious near-term (2030) and long-term (2040) carbon footprint targets, with in particular a 90% reduction in all emissions (scopes 1, 2 and 3) by 2040. At the end of 2022, carbon emissions had already fallen by 29% for the Group as a whole and 46% per employee against the 2019 baseline set by the SBTi. Of the many initiatives undertaken, Capgemini's Energy Command Center (launched in March 2022) achieved a 29% reduction in energy consumption across the Group's Indian campuses compared to 2019 and helped increase the share of

renewable energies in the Group's electricity consumption – which reached 87% in 2022 compared with 53% in 2021.

Thanks to progress achieved by Capgemini in 2022, the Group was admitted to the Dow Jones Sustainability Index (DJSI) Europe at the end of the year.

OUTLOOK

The Group's financial targets for 2023 are:

- Revenue growth of +4% to +7% at constant currency;
- Operating margin of 13.0% to 13.2%;
- Organic free cash flow around €1.8 billion.

The inorganic contribution to growth should be 0.5 points at the lower end of the target range and 1.0 point at the upper end.

CONFERENCE CALL

Aiman Ezzat, Chief Executive Officer, accompanied by Carole Ferrand, Chief Financial Officer, and Olivier Sevilla, Chief Operating Officer, will present this press release during a conference call in English to be held **today at 8.00 a.m. Paris time (CET)**. You can follow this conference call live via webcast at the following [link](#). A replay will also be available for a period of one year.

All documents relating to this publication will be posted on the Capgemini investor website at <https://investors.capgemini.com/en/>.

Velo3D to Announce Fourth-Quarter 2022 Results on March 2, 2023

21 February 2023

Velo3D, Inc. — a leading additive manufacturing technology company for mission-critical metal parts, announced that it will release its fourth quarter 2022 financial results after the market close on Thursday, March 2, 2023.

The company will host an earnings conference call and webcast to discuss its financial results at 2:00 p.m. Pacific Time / 5:00 p.m. Eastern Time the same day. The U.S. dial-in for the call is (877) 704-2771 and (201) 689-8732 for non-U.S. callers. Please ask to be joined to the Velo3D call.

The live webcast of the call can be accessed from the Events page of the Investor Relations section of Velo3D's website at ir.velo3d.com, along with the company's earnings press release and presentation which will be posted prior to the start of the conference call.

Implementation Investments

BWT Alpine F1 Team Bolsters Additive Manufacturing Workflow with Four 3D Systems SLA 750 3D Printing Systems

23 February 2023

Today, 3D Systems announced BWT Alpine F1 Team has purchased four SLA 750 3D printing systems to accelerate innovation and speed to track. The Team made the decision to purchase the systems after it extensively tested the product in its beta phase. BWT Alpine F1 Team is currently using the SLA 750 systems and 3D Systems' Accura® Composite PIV material to build models for wind tunnel testing, including complex aerodynamic parts with pressure tappings as well as small composite tools and high-temperature bonding jigs. The Team is seeing significant increases in productivity enabled by reduced build time and reduced time between builds. The resulting parts are delivering unmatched sidewall and surface quality, excellent feature detail, and high geometric accuracy, thus requiring less time to post-process and finish.

With 4 new SLA 750 3D printers, BWT Alpine F1 Team realizes unparalleled productivity and part quality for wind tunnel models, small composite tools, and high-temperature bonding jigs in their ADM Center.

"We are very impressed with the depth of precision engineering that went into the development of 3D Systems' SLA 750," said Ben Mallock, deputy head of aerodynamics, BWT Alpine F1 Team. "BWT Alpine F1 Team has a long-standing technical partnership with 3D Systems, and we were pleased to have early access to this product when it was still in beta. We put the SLA 750 through its paces during testing and achieved the best part quality we have so far seen in the market with considerably improved productivity. As a result, we purchased additional SLA 750 systems to bring our total to four. We are enjoying the positive impact this is having on our wind tunnel testing, and getting our innovation to the track faster. With the support of 3D Systems' SLA and SLS solutions, we're able to produce 25,000 additively manufactured parts each year. This is a true testament to the productivity these technologies enable."

3D Systems designed the SLA 750 to deliver the industry-leading combination of print size, speed, accuracy, and resolution for final parts that possess unmatched finish and mechanical performance. The printer includes 3D Sprint®, 3D Systems' all-in-one software to prepare, optimize, and print 3D CAD data. 3D Sprint delivers all the tools needed to quickly and efficiently go from design to high quality, true-to-CAD printed parts without relying on multiple software packages.

3D Systems co-developed Accura Composite PIV in conjunction with BWT Alpine F1 Team. Parts produced using this material take significantly less time to prepare – from CAD to wind tunnel – and deliver more accurate, high-resolution data. When used as part of a complete 3D Systems additive manufacturing solution – comprising Accura Composite PIV, the SLA 750, 3D Sprint, and advanced application services – BWT Alpine F1 Team has been able to maximize its wind tunnel investment and improve its understanding of the airflow over the car.

"As a company, 3D Systems has long prided itself on building solutions centered on addressing our customers' application challenges," said John Murray, VP, global ISG segment & business development, 3D Systems. "It's incredibly rewarding to see how our latest innovation in SLA technology is combined with a material we co-developed with BWT Alpine F1 Team to accelerate design iteration and innovation for wind tunnel testing. This is a testament to how

we're advancing the science of additive manufacturing to help our customers defy limitations and maintain competitive advantage.”

Deoleo pursues sustainability goals while driving operational efficiency with Siemens Xcelerator

21 February 2023

Siemens Digital Industries Software announced that Deoleo, the world's leading olive oil processing and bottling company, has implemented Opcenter™ software from the Siemens Xcelerator portfolio of software and services to help drive its digital transformation and build its sustainable future.

Founded in 1955, Spain, Deoleo is the world's leading olive oil company selling brands such as Bertolli, Carapelli, Carbonell, Koiple and Figaro. With a heritage of quality and old-world tradition, Deoleo is a champion of prioritizing responsible business using sustainability strategies that protect their farmers, suppliers and the land on which they rely. Deoleo's vision is to lead the production of olive oil into a more sustainable future.

Starting with building strong supplier partnerships to embed sustainable farming practices, Deoleo works closely with farmers using shared knowledge of olives to develop holistic solutions that promote their economic success while preserving and developing the land. To increase its operational efficiency and improve transparency, the company is also digitally transforming its business processes, from quality control and oil management to its research and development laboratory environment.

“Our sustainability strategy and manufacturing objectives require an effective digital system to manage the enormous number of variables we face along the entire value chain,” says Rafael Pérez de Toro, chief quality officer at Deoleo. “Digitalizing our production using Opcenter has allowed us to be more agile and efficient, gain greater control of resource management, create transparent communication, reduce costs and guarantee traceability. Digitalization is also making our business more sustainable. It is allowing us to reduce our environmental footprint and achieve our goal of zero waste by reducing the use of paper, ink and energy from paper-based processes”

Working with Siemens partner Sothis, Deoleo implemented Opcenter™ Execution Process software to digitalize all warehouse management and quality control processes in a single tool and Opcenter™ RD&L (Research, Development and Laboratory) software as its platform to streamline, optimize and align all formulated product data management. Opcenter RD&L helps Deoleo align product designs and processes with quality and regulatory requirements. Integrating and aligning R&D and manufacturing data and processes drastically speeds up the transfer of final product designs to mainstream manufacturing.

ENDRESS+HAUSER RELIES ON CENIT TO DRIVE TRANSFORMATION

21 February 2023

Switzerland-based Endress+Hauser Group is a leading global provider of measurement devices, services and solutions for industrial process technology. The Group's goals and commitments include the promise to leverage reliable measurement technology in the interest of greater efficiency and safety in industry. The basis for fulfilling this pledge is a pervasive culture of innovation and a consistent digitalization strategy, and this in turn demands flexible, ultramodern management of cross-enterprise processes.

FLEXIBLE, EFFICIENT PROCESSES AND CONSISTENT DATA

Aiming to take a decisive step toward this goal, Endress+Hauser initiated a collaboration with CENIT AG in January, 2022. Following an intensive evaluation process, the partners opted for cenitCONNECT Advanced Process Management (APM) as the ideal solution for meeting the complex requirements of Endress+Hauser's global change management – across all company locations and branches.

An important decision-making factor was the fact that cenitCONNECT APM is fully integrated with the SAP environment and works perfectly with SAP ECTR. Moreover, the highly scalable software is ideally suited to the modeling and control of operative and business management processes. Based on this solution, the partners now plan to create a homogeneous global process platform that ensures a consistent data foundation as well as maximum efficiency in process design.

“cenitCONNECT APM gives us end-to-end control of our global processes across a variety of SAP systems and technology platforms, plus the means to adapt them dynamically”, says Dr. Ulrich Binninger, PLM Solutions Architect PLM at Endress+Hauser. “We are impressed by the great flexibility and reliability of the solution. Particularly during the transformation process from the ECC world to SAP S/4HANA and the associated process harmonization, cenitCONNECT APM offers us precision-fit support”.

“Optimal design of consistent digital workflows offers significant competitive potentials”, says Peter Schneck, CENIT CEO. “We are pleased to be able to support a globally active company like Endress+Hauser as process and software partner in achieving this goal”.

Grupo MYT Reimagines Casual Dining with Oracle Cloud and Oracle NetSuite

21 February 2023

More than 25 years ago, a small family-owned crepe cart set out to bring traditional Parisian crepes to the Mexican street food scene. Today, Grupo MYT is one of Mexico's most innovative restaurant groups with four casual dining brands, Moshi Moshi, La Imperial, Cocina Abierta, Le Crêpe Parisienne, and Vive la Crepe. The group now boasts 50 restaurants across Mexico and recently expanded into the US. With plans to broaden its omnichannel approach and reach 120 total locations in the next three years, Grupo MYT selected Oracle MICROS Symphony Cloud Point-of-Sale (POS) and Oracle NetSuite Enterprise Resource Planning (ERP) to modernize its operations and improve scalability for expedited growth.

“Delivering curated and innovative dining experiences has always been the heart and soul of our vision,” said Alfredo Mier y Terán, co-founder and director of finance and strategic planning

of Grupo MYT. “Our restaurant portfolio has pioneered delicious, friendly, and creative dining options since 1996, and with Oracle MICROS Symphony in conjunction with NetSuite, Grupo MYT can remain competitive and creative while providing our guests with the same warm, friendly experience they’ve come to love.”

With MICROS Symphony, staff utilize an intuitive restaurant point-of-sale system that has helped streamlined the kitchen operations, reservations, inventory, and recipe management, all while helping ensure transactional and payment information is easily accessible and stored securely in a cloud environment. And when GrupoMYT was faced with the onslaught of third-party delivery apps and increased demand for online ordering, it knew it had to update its operations to maintain the personalized, consistent customer experience it was known for. The group was able to efficiently orchestrate multiple third parties, leveraging the Oracle PartnerNetwork (OPN) and Symphony’s modern APIs to revolutionize its online ordering and take out process, providing a quicker and more efficient service to satisfy every customer’s ordering preference across its brands.

“Tirelessly innovative and consistently evolving brands like Grupo MYT need a scalable and unified technology stack that’s just as nimble as they are,” said Simon de Montfort Walker, senior vice president and general manager, Oracle Food and Beverage. “The perfect recipe of Oracle MICROS Symphony and NetSuite delivers a streamlined customer and employee experience, and our robust partner ecosystem provides the limitless capabilities and enhanced configuration to serve Grupo MYT’s current and future growth initiatives.”

NetSuite has helped the group modernize its accounting, financial, and business management functions to increase operational and financial efficiencies. Previously, Grupo MYT’s lack of visibility into inventory and provisioning was negatively impacting productivity. But with NetSuite, it has automated core processes and gained real-time visibility across key operations, including financials, inventory, and procurement. These capabilities enable all employees to work off real-time information and make more informed decisions. With a unified view of its business, Grupo MYT can now focus on strategic projects that will help the company continue to grow and remain competitive.

“Adapting to customers ever-changing preferences continues to be the driving force of successful restaurants like Grupo MYT,” said Gustavo Moussalli, vice president of Latin America, Oracle NetSuite. “With MICROS Symphony and NetSuite, Grupo MYT has access to an integrated business system to gain visibility and control across its financial, inventory and guest experience operations, helping to increase efficiency and support future growth.”

Nemetschek Group Sponsors XPRENEURS Incubator Track at UnternehmerTUM to Drive Innovation in the Construction Industry

22 February 2023

The Nemetschek Group, a leading global software provider for the AEC/O and media industries, is sponsoring a track within the XPRENEURS program at UnternehmerTUM, Europe’s leading center for innovation and business creation at Technical University of Munich (TUM). Together, they launch the “Built Environment Track”. This specialized track is addressing start-ups that

drive innovation in the construction industry, particularly in the area of digital twins. The first batch starts this March.

XPRENEURS is a Munich-based tech start-up incubator by UnternehmerTUM. In the three-month incubator program, UnternehmerTUM and the Nemetschek Group jointly support tech start-ups from product development to market entry. The new Built Environment Track supports the young entrepreneurs to validate their business model, win first customers and secure their initial investment. The incubator combines science and industry, fostering start-ups to disrupt the Built Environment Industry – for more efficiency, sustainability, and quality across the construction lifecycle. Industry experts from the initiative for built environment, BEFIVE, and the TechFounders accelerator from UnternehmerTUM support the track.

"Digital twins are opening entirely new possibilities for the sustainable and more efficient planning, construction and operation of buildings and infrastructure", explains Tanja Kufner, Head of Startups & Venture Investments at the Nemetschek Group. "We are excited to be part of the Built Environment Track. The innovative potential of start-ups in the area of digital twins is massive and critical for the development of the construction industry."

The Nemetschek Group is deeply rooted in the academic environment, working closely with educational institutes like the TUM in Munich. UnternehmerTUM supports the development of innovative solutions. With their incubator and dedicated programs for start-ups, they turn ideas into marketable innovations. The XPRENEURS program includes mentorships, office spaces and direct access to venture capital and business angels and aims to support start-ups in an early stage. The Nemetschek Group is supporting innovation for the construction industry with a dedicated incubator program for start-ups that develop solutions for the major challenges of the industry. Technologies like computer vision, digital twin solutions and AI are of particular interest for the program. The start-ups are selected throughout February. The program will start in early March.

"We are pleased to welcome the Nemetschek Group, a strong partner with leading experts, into our ecosystem" says Prof. Dr. Helmut Schönenberger, founder and CEO of UnternehmerTUM.

The funding of the Built Environment Track is part of the Nemetschek Group's venture strategy, to drive innovation and shape the construction industry of the future.

OL Groupe selects HPE GreenLake to support its energy efficiency plan and improve the visitor and fan experience

21 February 2023

Hewlett Packard Enterprise announced that OL Groupe has selected the HPE GreenLake edge-to-cloud platform to modernize its entire on-premises infrastructure. The HPE solution enables OL Groupe to increase its agility to deploy IT resources, reduce its environmental footprint and accelerate the development of its new entertainment offerings to its millions of fans worldwide.

The OL Group owns the Olympique Lyonnais professional soccer club and operates its own stadium, the Groupama Stadium, located in Décines-Charpieu, 365 days a year. The group

operates in many domains such as soccer and other major sports events and entertainment. The group needed to evolve its technology environment and meet the very strong requirements of these activities in terms of availability, agility, security, resilience, and profitability.

A flexible architecture to meet the group's new offers

As part of the renewal of its equipment, OL Groupe called on HPE and its partner Cheops Technology to design and deploy a modern and resilient on-premises technology platform, distributed over two data centers hosted within the Groupama Stadium, in order to respond to the rapid development of new services, while allowing better cost management.

This new platform, delivered on a pay-per-use basis with HPE GreenLake and managed from a single cloud interface, leverages HPE Alletra cloud-native data infrastructure and HPE ProLiant high-performance general-purpose servers.

The main missions of this new software-defined platform are to:

- **Ensure business continuity 365 days a year, 24 hours a day**, via a rapid disaster recovery solution running on two separate data centers and capable of providing greater resiliency, including HPE data protection solutions and HPE StoreOnce backup appliances that support all stadium data streams.
- **Improve visitor safety in the stadium**, with expanded computing and storage capabilities for better management of video surveillance devices and higher image definition.
- **Improve performance**, to support the development of OL Groupe activities and the multiplication of public events, concerts, sports and esports competitions, especially during the operation phase of the future LDLC Arena, owned by OL Group, by the end of 2023.
- **Control its environmental impact** by using an efficient and flexible on-premises technology platform to avoid over-provisioning while cutting energy costs in half.

Addressing environmental issues through technology

As the first French League 1 soccer club to be awarded a label certifying its action for the preservation of the environment¹, Olympique Lyonnais reaffirms its commitment to the environmental cause by choosing the HPE GreenLake solution. This solution has enabled OL Groupe to reduce the energy cost of its IT structure by nearly 50% and is helping it to achieve its bold objective of reducing its energy footprint by 20% each year.

Specifically, the new HPE infrastructure and services delivered by CHEOPS TECHNOLOGY have enabled the group to increase its computing capacity fourfold and improve its storage, all while reducing the demand on resources to power and cool it and ensuring that additional capacity is always available.

"The continuation of our collaboration with HPE allows us to fully enter the concrete phase of our energy efficiency plan, with the objective of reducing our energy consumption by 20% while guaranteeing the continuation of our sports and entertainment activities," said Emmanuelle

Sarrabay, Deputy Director General for Finance and Information Systems and Corporate Legal Affairs. "The challenge is to deliver the best service and an optimized fan experience and we have full confidence in HPE's teams to help us achieve our goals with their expertise."

"We are very proud of the choice made by Olympique Lyonnais to modernize its technology environment and commit to the environment with HPE technologies," said Alain Melon, general manager of Hewlett Packard Enterprise in France. "Our HPE GreenLake platform provides Olympique Lyonnais with a scalable and flexible infrastructure capable of meeting the group's future technology needs to continue to deliver an exceptional experience to its fans and visitors."

CHEOPS TECHNOLOGY, a long-time Platinum Partner of HPE and Olympique Lyonnais, brought its expertise and experience to enable a seamless installation of the infrastructure and continues its collaboration with future projects, such as the LDCL Arena, a 16,000-seat event venue owned by OL Groupe that will open in the last quarter of 2023.

"We are delighted to continue the adventure with Olympique Lyonnais alongside HPE," said Claude Fournier, Regional Director of CHEOPS TECHNOLOGY. "In 2015, when we implemented the previous infrastructure, the qualities sought were mainly performance, resilience and security. During this renewal, we added a strong criterion on the environmental impact. The gains obtained are in line with the objectives of our service centers which continue to ensure the daily remote operation of this new architecture."

Oliver Packaging Applies AI to Infor CloudSuite Industrial to Help Provide Critical Food Supplies to Senior Meals Programs, Healthcare Organizations and Schools

23 February 2023

Infor®, the industry cloud company, today announced that Oliver Packaging & Equipment Co. — a leading manufacturer of premium food equipment and meal packaging systems — is leveraging its integrated Infor CloudSuite Industrial and artificial intelligence (AI) solution to help provide critical food supplies to senior meals programs (including Meals on Wheels America), healthcare organizations, schools, grocery stores and more.

The integrated solution enabled Oliver Packaging, headquartered in Walker (Grand Rapids), Michigan, to optimize its inventory 30 times faster while boosting customer and employee satisfaction.

"The pandemic created greater demand for packaged meals, combined with supply chain challenges," said Mitch Summerfield, president of Oliver Packaging. "With Infor CloudSuite Industrial in place, we were able to meet these challenges and improve our business significantly across the board — margins, NPS1 (Net Promoter Score), on-time delivery, and employee satisfaction. Now, with Coleman AI integrated into some of our key processes, we can stretch that even further simply because we're able to better project what products we need."

With customer purchase patterns continually changing, Oliver Packaging knew there had to be a better way to detect these changes so that the right products were delivered at the right time — to improve the bottom line and customer experience.

Leveraging integrated Infor Coleman AI services with Infor CloudSuite Industrial, Oliver Packaging implemented anomaly detection algorithms to identify abnormal customer orders and amounts quickly and more accurately. Daily processing of these anomalies, using machine learning, is delivered to the Oliver Packaging team in a user-friendly dashboard, where it reviews and analyzes the variances for sales and operations to make critical, real-time business decisions.

Implemented in less than 90 days, the AI solution has helped Oliver Packaging realize the following business benefits, in addition to optimizing its inventory 30 times faster to keep pace with shifting customer demand:

- 90 percent reduced employee workload in identifying customer order anomalies
- \$1.3 million in revenue variance (across 15 percent of its customers, where the ordered amount was less or more than normal) identified in just two months
- Lower costs by reducing the need to ship more expensive, alternative solutions or to expedite delivery when the right item is not in stock
- Better customer retention, with sales able to quickly contact customers to address new requirements
- Improved customer satisfaction by providing the right product instead of shipping alternative solutions

Oliver Packaging could implement the solution in less than 90 days because the Infor OS technology platform enabled the company to automate the process of collecting, analyzing and consuming data. Customer orders from Infor CloudSuite Industrial are automatically collected and managed in the Infor Data Lake, with integrated services to build, deploy and consume AI-driven insights. The Infor OS platform includes tools for data integration, data management, reporting and analytics, and enterprise performance management, as well as tools for machine learning and AI solutions, so that Oliver Packaging can deploy data-driven applications in weeks instead of months.

As a data-driven company, Oliver Packaging has been closely tracking the company's return on investment in moving to the cloud with Infor CloudSuite Industrial.

"Every ERP integration has its challenges, but what's critical is ensuring that you have the right partner with industry expertise to work through those issues," Summerfield said. "We now have a system that has greatly improved our operations, and we've seen significant margin improvement simply because we're able to better project what products we need. This company is light years from where it was four years ago."

Four years ago, Oliver Packaging worked with Infor and its implementation partner, Decision Resources, Inc. (DRI), to move to the cloud. Since then, both customers and employees are

happier because customers can get the right products at the right time and employees can take advantage of the operational efficiencies now in place. This has resulted in Oliver Packaging achieving:

- A 55 percent increase in on-time deliveries
- A 15-point increase in its Net Promoter Score (NPS)
- A 15-point increase in employee engagement

Siemens and Centrale Nantes to continue cutting-edge simulation research

20 February 2023

Siemens Digital Industries Software has announced that it has signed an agreement to sponsor a multi-year Academic Chair for funding research activities with Centrale Nantes University ("Centrale Nantes") to continue its research into Smoothed-Particle Hydrodynamics (SPH). The arrangement provides funding to Centrale Nantes to support and enhance the computational fluid dynamics (CFD) simulation capabilities of Siemens' Simcenter™ software. Simcenter is a flexible, open, and scalable solution combining predictive simulation and test applications and is a key component of the Siemens Xcelerator portfolio.

Centrale Nantes, founded in 1919, trains versatile engineers to a very high scientific and technical level. Beyond this renowned training, with the support of numerous strong institutional and industrial partnerships, Centrale Nantes produces world-class academic and applied research. Centrale Nantes' Research Laboratory in Hydrodynamics, Energetics and Atmospheric Environment (LHEEA) is an internationally recognized leader in CFD and Smoothed-Particle Hydrodynamics (SPH). SPH is a more efficient than traditional methods of simulating fluid flows when there are impacts, splashes, or moving/deformed parts present in the fluid such as gearbox or e-motor lubrication, tires aquaplaning or vehicle water management.

In 2020, Siemens acquired Nextflow Software along with its technology named SPH Flow which was co-developed by Centrale Nantes, and co-developed with Consiglio Nazionale delle Ricerche - Istituto di Ingegneria del Mare (CNR-INM - the Italian National Research Council - Institute of Marine Engineering). This research chair will enable Siemens to continue its mutually beneficial relationship with the research teams at Centrale Nantes and CNR-INM and keep the organizations at the cutting edge of fluid flow simulation technology.

"This research chair continues an already fruitful relationship that benefits not only Siemens and Centrale Nantes, but the wider engineering and simulation community as we explore the cutting edge of fluid flow simulation technology together," said Jean-Claude Ercolanelli, Senior Vice President, Simulation and Test Solutions, Siemens Digital Industries Software. "The work done by the LHEEA lab is world-leading and should benefit our customers who are exploring the outer boundaries of what can be achieved with simulation."

"This research chair with a major group like Siemens is a fine demonstration of both the excellence of our research and the technological development role of our institution where companies of all sizes can find a real support for their research," said Jean-Baptiste Avriillier

director of Centrale Nantes. “It is the result of a long-term collaboration and I am proud to sign this agreement, which marks the beginning of a new adventure with Siemens Digital Industries Software”.

Telefónica Germany Selects TCS as Transformation Partner to Build Future-Ready Operations Support Systems

20 February 2023

Tata Consultancy Services (TCS) has been selected by Telefónica Germany, a leading integrated telecommunications provider in Germany, to help the latter transform its end to end service assurance applications and processes within its Operations Support Systems (OSS) stack and further enhance customer experience.

Telefónica Germany envisions driving innovation with continuous digital transformation to enhance people’s lives and deliver connectivity to individuals and businesses. Towards realizing this vision, the telecom operator selected TCS as its transformation partner to build a future-ready OSS to offer customers a reliable, resilient, and secure network experience.

TCS will leverage best-in-class methodologies – Agile, DevOps, Continuous Integration, and Continuous Deployment, and Continuous Testing (CI/CD/CT) framework and its deep cloud expertise to modernize the OSS service assurance application estate using cloud-native technologies and AI/ML to predict and pre-empt network faults. This will enable Telefónica Germany to implement zero-touch cloud-based operations and provide consumers with a more resilient network service. The reimagined service assurance processes will result in faster turnaround times and a transformed customer experience.

Additionally, the new future-ready, simplified service assurance systems within Telefónica Germany’s OSS landscape will help accelerate the launch of newer products, including new 5G-based growth areas, with near-zero downtime.

“We are excited to partner with TCS to re-engineer our service assurance landscape as we transform towards a future-ready customer experience. Telefónica Germany’s technology and innovation leadership, coupled with TCS’ deep domain competencies and proven digital capabilities, will strengthen and accelerate Telefónica Germany’s digital transformation towards ‘best Telefónica ever’,” said **Mallik Rao, Chief Technology & Information Officer, Telefónica Germany.**

“TCS is delighted to expand its partnership with Telefónica Germany to transform its customer experience with a reimagined service assurance landscape. Our deep contextual knowledge, proven digital transformation capabilities and partner ecosystem will propel Telefónica Germany’s transformation,” said **V Rajanna, Global Head, Communications, Media, and Technology Business, TCS.**

Present in Germany since 1991, TCS currently partners with over 100 leading German corporations in their growth and transformation journeys. TCS has been ranked the fastest-growing IT service provider in Germany. Additionally, it was named the number one IT service

provider in customer satisfaction by CXOs in a survey by Whitelane Research. TCS was also recognized as a top employer in Germany by the Top Employers Institute.

UK's Phoenix Group expands partnership with TCS

21 February 2023

TCS has announced an expansion of its long-standing partnership with Phoenix Group, UK's largest long-term savings and retirements provider, to digitally transform the latter's ReAssure business using the TCS BaNCS platform.

Phoenix Group acquired ReAssure, a UK-based life insurance provider, in 2020, and has engaged with TCS to drive synergies and enhance customer experience for ReAssure's policyholders. The partnership will result in a transformation of ReAssure's operations, consolidating the heritage business on the TCS BaNCS-based digital platform used to administer Phoenix Group's other books of business. Customer administration and the servicing of ReAssure's 3 million policies will be managed by Diligenta, TCS' regulated subsidiary in the UK, on behalf of Phoenix Group. The contract is valued at over £600 million.

WEISS lays foundation for configure-to-order with CIM Database PLM

20 February 2023

WEISS introduces CONTACT CIM Database PLM as the group's new global PLM system. This enables the automation expert to map its CTO and ETO processes end-to-end and take into account the increasing product variety early on in the engineering process.

With its innovative automation solutions, WEISS GmbH is one of the world's leading system suppliers for the automotive industry, mechanical and plant engineering, life sciences, and electronics. Their reliable and durable rotary indexing tables, handling units, delta robots, and linear transfer systems pave the way for the industrial production of the future. The family-owned company is active worldwide and headquartered in Buchen, Germany. Founded in 1967, their 700 employees now operate sales, service, and manufacturing locations in 49 countries.

WEISS relies on CONTACT Software's CIM Database PLM to optimize its global PLM processes and standardize the different product data storage systems within the group. WEISS was particularly impressed with the consistency and expandability of the underlying CONTACT Elements platform. In the first expansion stage, CIM Database is rolled out at the German locations in Buchen and Walldürn as well as in Poland. Subsequently, sites in the US, India, and China will follow.

CIM Database enables WEISS to represent the increasing product variety at an early stage in their MCAD and ECAD development. Configure-to-order (CTO) and engineer-to-order (ETO) are modeled with the help of various process types and flows. Bills of materials are automatically derived and will be synchronized with the ERP system (SAP) in the future. WEISS will also integrate the change management, currently handled in a separate system, into CIM Database.

With its new PLM solution, WEISS accelerates product development and shortens its time to market. "CIM Database meets our ambitious requirements regarding efficient processes and

multidisciplinary collaboration in product development,” explains Marcel Nagel, CDO & CTO at WEISS. “This enables us to develop our products – which will increasingly consist of software and services – with the best possible digital support.”

Wildfang Takes a Bite Out of Inefficiency with Centric PLM Cutting Errors and Saving Time

20 February 2023

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

Founded in 2012, Wildfang is headquartered in Portland, Oregon. Their mission is to answer the question: why is the fashion industry still clinging to outdated gender norms that serve no one? The company evolved from a third-party retailer to private label to ultimately producing the garments they envisioned. Corporate values are strong: they aim for inclusivity and achieved climate neutrality in August 2022. Wildfang was looking to drive efficiency into product development as well.

As the company grew and the number of SKUs expanded, human error while using spreadsheets began to increase. With no central management of data, work was being duplicated and when something was modified, changes had to be made in multiple places. Kelly Hickman (she/her), Production Manager at Wildfang says, “It was a really high-risk and super inefficient process, especially as we’re growing so rapidly.” She knew the company needed a PLM solution. After building a scorecard and evaluating the different candidates, Wildfang chose Centric PLM®.

In addition to the usual improvements that PLM is known for, Wildfang had the insight to target some areas that companies don’t initially set their sights on. “Our planning and finance roll ups are very automated now...” Hickman says.

Product News

Atos launches new 5G security offering

22 February 2023

Atos, a global leader in managed security services, announced the launch of its new **‘5Guard’ security offering** for organizations looking to deploy private 5G networks and for telecom operators looking to enable integrated, automated, and orchestrated security to protect and defend their assets and customers.

A new end-to-end 5G security portfolio

As 5G is now highly strategic for business, with customers looking to improve their 5G security posture, Atos’ offering aims to help organizations identify risks and develop an **end-to-end security strategy** to protect critical business and data and accelerate their digital

transformation. 5Guard minimizes risks across radio access network (RAN), multiple access edge computing (MEC), 5G core network, and multi-cloud platforms.

More specifically, Atos' 5Guard offering consists of:

- **Support in definition of 5G security strategy**, through Atos' consulting capabilities. Atos helps clients assess their systems, designs, architectures and then provides strategic recommendations - based on the security capabilities of the infrastructure, architecture, and components, in accordance with security standards, frameworks and regulations. Atos' strategic recommendations address customer's business requirements based on their risk appetite.
- **5G data and network security solutions** to cover identified risks and security gaps, leveraging best-of-breed 5G security vendors and Atos' proprietary technological building blocks.
 - Related in **Atos' product portfolio** are: Atos' encryption solutions (Trustway); identity and access management software; public key infrastructure solutions (IDnomic); and Atos Managed Detection and Response (MDR) platform that elevates the security of 5G network elements, applications and workloads, by detecting and responding to potential threats in near real-time.
 - **Partner solutions** include 5G security set of solutions by Fortinet, a leader in converged high-performance security for enterprises and telecom operators, providing comprehensive security for user and control planes, application and platform protection, exposure security and multi-tenant security.
- **5G security operations**, based on Atos managed security services, for multi-cloud security, detection and response, and 5G network security.

5Guard can also be integrated with Atos' private secure radio network system, Lifelink, for organizations looking to deploy fully featured and secured 4G LTE and 5G private networks.

Addressing a wide range of 5G security needs

With 5Guard, Atos helps customers meet their specific 5G private network security requirements in compliance with international regulations, such as 3GPP. Atos also partners with 5G operators, enabling them to extend their portfolio and/or generate new opportunities, by leveraging Atos' experience in designing, deploying, and operating agile cloud to edge security solutions.

By accessing Atos' global community of security experts who help orchestrate and monitor 5G network security, customer security teams will benefit from best practices for maintaining secure networks.

"While 5G can be a game-changer for organizations, we want them to be able to streamline their security deployment and configuration process in their specific 5G"

environment.” said **Zeina Zakhour, VP CTO Digital Security at Atos**. “Our 5Guard cutting-edge offering represents our commitment to providing the highest level of security for organizations looking to deploy private 5G networks and for telecom operators”.

“We are delighted to collaborate with Atos in delivering their ‘5Guard’ 5G security offering. Fortinet solutions provide cybersecurity capabilities for private and public 5G networks and services and enable greater trust and compliance. By interfacing with Atos’ managed security services, we provide a comprehensive solution that protects 5G networks, 5G-enabled industrial environments and 5G services, for the benefit of the ecosystem” said **John Maddison, EVP of Products and CMO at Fortinet**.

AVEVA Advances Predictive Analytics Market with New AI Powered Software Release

22 February 2023

AVEVA, a global leader in industrial software, driving innovation and sustainability, announces the launch of its latest AVEVA Predictive Analytics software release, purpose-built for predictive monitoring of industrial assets in oil and gas, power, chemicals, mining and minerals, and manufacturing. The software helps industrial operators achieve the highest possible levels of reliability and performance of industrial assets while improving sustainability and increasing workforce productivity.

This software release makes it significantly easier to deploy, validate, maintain, and clearly interpret the results of predictive models, enabling asset stakeholders to make better, more timely and informed decisions to improve profitability.

The new release features automated model building. This new capability enables users to autonomously deploy new predictive models in a single action. This greatly reduces the time required to deploy and scale the predictive maintenance solution while reducing errors and ensuring consistency in model development.

Inderpreet Shoker, ARC Advisory Group said “With rising market pressures industrial organizations must find ways to facilitate agile, resilient, and profitable operations. The predictive analytics market continues to evolve as the technology has advanced to a point where the data can be leveraged in such a way that asset stakeholders can easily operationalize predictive monitoring of their assets at scale enabling rapid improvements in asset reliability and performance.”

“Key for success is connecting data, systems and processes, enabling people throughout operations and maintenance to make, and act upon, decisions confidently. Scalability of predictive maintenance efforts for maximum return on investment will definitely be seen as a must have for many industries going forward.” Continued Inderpreet Shoker, ARC Advisory Group.

AVEVA continues to deliver on market and customer requirements with a bring your own algorithm capability. This enables data science teams to add their own artificial intelligence algorithms and intellectual property to the solution. Furthermore, deep integration with the

AVEVA PI System ensures AVEVA's customers are continuing to capture increased value from their existing industrial software investments.

David Bleackley, Value Chain Optimization Lead at AVEVA said: "Data is the new currency of the industrial world and an effective predictive asset monitoring strategy is predicated on the ability to continuously transform massive amounts of sensor data into clear and actionable results. Operationalizing a predictive monitoring program at scale has never been easier than it is now with AVEVA's PI System and latest predictive analytics software release".

Bleackley added: "This latest update demonstrates AVEVA's continued leadership in creating innovative solutions that transform the global industrial analytics market."

Cadence Delivers 13 New VIP and Expands System VIP Portfolio to Accelerate Automotive, Hyperscale Data Center and Mobile SoC Verification

16 February 2023

Cadence Design Systems, Inc. announced the availability of 13 new Verification IP (VIP) solutions that enable engineers to quickly and effectively verify their designs to meet the specifications for the latest standards protocols. The new Cadence® VIP offerings empower customers to confidently develop their next-generation automotive, hyperscale data center and mobile SoCs and microcontrollers while keeping pace with the latest industry standards, including Arm® AMBA® 5 CHI-f, Universal Chiplet Interconnect Express™ (UCIe™), GDDR7, DDR5 DIMM, MIPI® A-PHY® and SoundWire® I3S, and USB4 2.0 interfaces.

The new Cadence VIP offer customers a comprehensive verification solution for the most complex protocols. Cadence customers have access to a consistent application programming interface (API) across all VIP with complete bus function models (BFMs), integrated protocol checks and coverage models, facilitating rapid adoption. The VIP support multiple application areas and specifications, including:

- Hyperscale data center:
 - UCIe
 - AMBA 5 CHI-f
 - DTI
 - Latest version of DDR5 DIMM
- Automotive:
 - MIPI A-PHY 1.1
 - CAN XL
 - Flash ONFI 5.1
- Consumer and mobile:
 - USB4 2.0

- GDDR7
- MIPI SoundWire I3S (SWI3S)
- Latest version of LPDDR
- DFI
- HDMI 2.1

All Cadence VIP solutions include Cadence TripleCheck™ technology, which provides users with a specification-compliant verification plan linked to comprehensive coverage models and a test suite to ensure compliance with the interface specification. The new VIP also support the expanded Cadence System-Level Verification IP (System VIP), which provides SoC-level test libraries, performance analysis, and data and cache coherency checkers. Using the expanded System VIP portfolio, customers can experience up to 10X efficiency improvements compared to a manual process for SoC verification.

“The Cadence memory VIP is a critical part of our verification process and instrumental in the successful deployment of our memory PHY IP,” said Ricky Lau, co-founder and CTO of The Six Semiconductor Inc. “Cadence continues to deliver new VIP offerings and advanced SoC verification technologies that support the latest standards. The Cadence VIP offerings have significantly reduced our development time and increased the confidence of our customers.”

“As requirements evolve and demand increases for higher bandwidth, lower power and more effective cache coherency management, new protocols arrive to address these issues,” said Paul Cunningham, senior vice president and general manager of the System & Verification Group at Cadence. “With these 13 new VIP, Cadence is offering customers solutions to ensure the designs comply with the standard specifications as well as application-specific timing, power and performance metrics, providing the fastest path to IP and SoC verification closure.”

The new VIP solutions are part of the broader Cadence verification full flow, which includes Palladium® Z2 emulation, Protium™ X2 prototyping, Xcelium™ simulation, the Jasper™ Formal Verification Platform, the Helium™ Virtual and Hybrid Studio, and the Verisium™ AI-Driven Verification Platform. The Cadence verification full flow delivers the highest verification throughput of bugs per dollar invested per day. The VIP solutions and verification full flow support the company’s Intelligent System Design™ strategy, enabling SoC design excellence.

EagleView Revolutionizes Asset Management with AI-Based Solutions

15 February 2023

EagleView, a leading provider of aerial imagery, software, and analytics, is excited to announce the launch of its next-generation asset management solutions. Combining high-resolution oblique aerial imagery with machine learning, EagleView is solving a variety of asset management challenges for local governments and commercial organizations.

“Effective asset management requires insight-ready data,” said Chris Jurasek, CEO of EagleView. “When we combine the level of detail available in our industry-leading oblique imagery with

the power of machine learning, we can give asset managers the data they need to truly transform their workflows and solve an unlimited number of real-world problems.”

This cutting-edge technology provides a comprehensive view of geographically dispersed stationary assets (including natural resources), enabling organizations to make data-driven decisions and allocate resources and budgets more efficiently. EagleView’s integration of aerial imagery and machine learning can assist organizations in solving a variety of asset management challenges, including:

- Providing high-resolution oblique aerial imagery of assets such as roads, bridges, buildings, infrastructure, and vegetation which can be used for accurate inventory and monitoring.
- Automating the process of data collection and change analysis, reducing the time and resources required for manual inspections.
- Identifying patterns, trends, and anomalies in asset performance over time, which can help prioritize maintenance and repair work.

As organizations manage more staff, materials, and resources, they can no longer afford to rely on non-technical inventory management solutions.

“We are eager to work with asset managers to understand their unique challenges and opportunities,” said John Garrish, EagleView’s Chief Product Officer. “By combining our expertise in high-resolution oblique aerial imagery with machine learning, we know we can make a significant impact on the asset management industry.”

EagleView believes its technology platform represents the future of asset management and is excited to be at the forefront of this transformation. Given the expansive nature of the field, EagleView is seeking pilot customers who have recurrent asset management challenges to trial new software.

EON Reality Launches Spatial AI and Announces New Prompt Feature, Startup and Competition Support Programs

15 February 2023

EON Reality, Inc. (“EON Reality”), a global leader in Virtual and Augmented Reality (“XR”) industry and education solutions powered by Artificial Intelligence (AI), announces several new updates alongside the formal launch of the Spatial AI-powered EON AI Assistant.

The proprietary Spatial AI allows EON AI Assistant to “show and tell” users in the digital world in real time, while simultaneously offering guidance and assistance in the physical world like never before. This combination of a learning-capable AI brain with a fully interactive XR body gives EON AI Assistant the capability to remove the confines and overcome the shortcomings of many modern AI programs, which are simply a digital take on “a brain in a jar.” Spatial AI provides that brain with an avatar and the contextual awareness to use it — whether that means being able to see and react to a user’s smartphone movements or physically interacting with a digital object.

This technology also allows users to create persistently tracked experiences that include text, voice, videos and 3D assets. Through commonly owned mobile devices, users can easily access EON AI Assistant and receive personalized directions and support in a wide range of situations.

The first newly announced update comes directly to EON AI Assistant itself. The “Prompts” feature will allow users to begin the creation process by selecting a single topic, with 87 different academic prompt options across 7 categories available at launch in addition to 6 unique enterprise groupings for industries like tourism, health, manufacturing, aerospace or energy, and the ability to use engagement prompts to transform any segment into an engaging XR experience. Those options allow users to simply select a topic, provide a bit of information about the type of experience they’d like the EON AI Assistant to create, and then simply confirm that the portals and content created by the AI are correct.

With this new feature, EON AI Assistant will be as simple and engaging as watching your favorite streaming service, but while creating fully formed AI-powered XR experiences. This solves the content creation problem users around the world are facing regardless of subject matter or type of content.

In addition to the new update to EON AI Assistant, EON Reality will also soon be rolling out two new programs for both current and prospective clients.

The first program is the EON AI Startup Program, which helps bring Spatial AI to cutting-edge entrepreneurs and small businesses looking to expand through its usage. While EON Reality has long been focused on delivering its solutions to governments, academic institutions and established businesses for decades, this program marks the first time the company is taking a specific interest in early-stage startups.

By contributing to seedling businesses through access to solutions, support and investments, EON Reality hopes to help the next generation of entrepreneurs to develop new uses for and adoption of AI-powered XR. The best and brightest of these potential startup partners will also get the opportunity to present their ideas at events like EON Experience Fest, where they could connect and network with thousands of potential investors and partners at once.

The final major announcement from Wednesday’s launch event was the addition of a new AI competition program.

Rather than hosting its own global and regional competitions, EON Reality will now be providing the opportunity for partnered academic institutions, governments and other organizations to run their own competitions while offering as much or as little support as needed. As a part of its ongoing grant program, EON Reality will cover the entirety of the training, logistics and product costs for approved partners hosting a large-scale competition, leaving only the basic third-party infrastructure fees for the organization. Even for partners who already purchased the products and do not require new training, EON Reality’s customer success department will now work directly with institutions to ensure that their local and institution-based competitions succeed.

Along with these major changes, the new release also includes bug fixes and other minor enhancements. The next big reveal of updates to EON Reality’s programs and offerings will take place on March 23 at the year’s first EON Experience Fest event in California.

Hexagon's digital reality platform, Nexus, is now available to manufacturers – putting an end to silos and enabling faster innovation

23 February 2023

- Nexus's open cloud platform allows manufacturers to connect Hexagon and third-party ecosystem tools to enable real-time collaboration and feedback between engineering and manufacturing in a way that has never before been achieved in the industry
- Nexus is open to anyone from today, powering the first four solutions: a cloud-based metrology trend analysis and collaboration App; a connected workflow Solution to optimise design for additive manufacturing processes; an App powered by machine learning that enables companies to save millions by predicting the performance of new materials before they are made and cloud-native material data management App
- Co-engineered with Microsoft using the latest cloud technologies, Nexus helps manufacturers empower siloed teams so they can apply the data they need to invent sustainable and optimised products in a more efficient and agile way, and manufacture them to the required quality

Hexagon's Manufacturing Intelligence division has launched its digital reality platform, Nexus. Announced earlier today, the new platform applies the latest cloud technologies to unblock innovation bottlenecks, enabling global teams to collaborate in real-time across the product lifecycle – from design and engineering to production and quality – to solve design and manufacturing problems together and accelerate time to market.

Nexus makes this possible by connecting equipment, data and processes to create a digital reality where insights are available to people in real time, in context and in one place so they can make better-informed decisions. Hexagon customers will be able to connect what they need from its portfolio of hundreds of design and engineering, production, and metrology software applications and devices, as well as third-party technologies. The first solutions on Nexus are commercially available from today:

Metrology Reporting, a Nexus App: The app connects Hexagon and third-party metrology data sources in Nexus' secure cloud environment so that companies of all sizes can immediately report on previously untapped quality control data from their equipment to spot trends and identify tolerance issues. Any user can generate interactive three-dimensional CAD-based reports and insightful trend plots, KPIs and compliance documentation and up-to-the-minute data with colleagues, customers or suppliers.

Materials Connect, a Nexus App: An all-new, cloud-based library for material data, that empowers manufacturers or material suppliers to manage material data, physical test data and behaviour models for use in product Computer Aided Engineering (CAE) workflows.

Materials Enrich, a Nexus App: A first-of-its-kind Enrich app, it uses the Nexus platform's machine learning capabilities and cloud-accelerated material behaviour simulations to help users find and simulate optimal materials that may have never been made or measured, improving the performance and sustainability of their products.

Design for Additive Manufacturing (DfAM), a Nexus Solution: A pre-configured Solution that makes it easier and more efficient for teams to jointly develop an optimal metal 3D-printed part and prepare it for a successful print using the laser powder bed fusion (PBF) process. Customers can use the Nexus web interface to connect Hexagon’s MSC Apex Generative Design and Simufact Additive process simulation software with AM Studio from CADS Additive and Materials Connect via the cloud, and easily manage user access to projects.

Processes such as DfAM have traditionally been siloed – with at least three different engineers and separate software applications solving problems in isolation. This lack of connectivity can lead to costly and time-consuming manual processes and loss of valuable data. With Nexus, these silos are dismantled so that every engineer involved in the process is able to access the desktop software they need and connect their tools to work through problems together, in real-time, in a way that has never before been achieved in the industry.

Nexus will enable users to build on their existing portfolio of technologies by promoting the discovery of new tools, training, and support across an unparalleled portfolio of software and hardware from Hexagon and its partner ecosystem. At launch, partners include Oqton, which will connect DfAM and similar pre-production workflows to its Manufacturing Execution System (MES), allowing customers to leverage data to improve lead times, address quality issues and empower operators. Electronic Design Automation (EDA) software company Altium will also connect its portfolio to Nexus to provide engineers greater insight with which to design and manufacture products with electronic systems.

Parth Joshi, Chief Product and Technology Officer for Hexagon’s Manufacturing Intelligence division, said: “Companies across the world are pushing the boundaries of innovation, and Industry 4.0 is bringing ever more tools, technologies and data sources into view. However, the industry has a problem – processes and data sources are often siloed and team members struggle to collaborate across disciplines. This is severely hampering progress.

“If companies are to reap the benefit of smart manufacturing, we need to change the way we work. With Nexus, our aim is simple – to bring innovative minds together across disciplines and empower them. By leveraging Hexagon’s expertise in innovation, and by connecting people, technologies, and data we can help businesses bring ideas to life faster than ever before. We’re excited to see what customers will do with the technology from today.”

These first solutions can be accessed and managed through the Nexus web interface, with a single login and user experience. Customers can invite any external user to the platform to share information, for example sharing up to date ‘live’ metrology trend reports up and down the supply chain with one click. As more Apps and Solutions are connected to Nexus, it will make it easier for companies to make improvements to how they work and to solve problems with colleagues in the same company or across the supply chain.

Nexus is designed to help companies of all sizes, making the benefits of the cloud accessible without prohibitive cost, lengthy system integration or IT expense. There is no requirement to “move to cloud” as the platform connects desktop and cloud tools together, and, because customers only need to share the data that their team members need, performance is optimised and intellectual property is protected at every step. The platform’s open architecture

allows larger companies to connect teams using Nexus with their enterprise software platforms, maintaining their established business and regulatory processes whilst enriching the digital thread where required with missing data.

Supporting quotes

"In our smart, connected future everyone will be on someone's digital thread. At the same time, industrial companies are increasingly looking to the cloud to support their critical business needs. With Nexus, Hexagon helps their customers to more easily consume their considerable digital solution portfolio in the cloud, helping them to optimise their digital threads as part of their overall IT landscape."

Stan Przybylinski, Vice President, CIMdata

"We're happy to bring Oqton's MES capabilities and IoT machine connectivity to Hexagon's Nexus platform. Like Hexagon, we are strong believers in open platforms and are excited to offer customers the best tools in the market, with real-time data-driven workflows that span engineering, design, and simulation processes. This next generation platform blends design and manufacturing to reduce lead time while helping to improve outcomes and quality."

Ben Schrauwen, Founder and SVP, Oqton.

"We are very excited to partner with Hexagon to connect our Altium 365 platform with Nexus - our shared commitment to openness means we can quickly offer customers value. It will enable our vision of an 'Intelligent by Design', industry solution empowering teams to evaluate the impact of design choices earlier using the vast intelligence that Nexus and our Altium 365 solutions ecosystem offer across the product lifecycle."

Ted Pawela, Chief Ecosystem Officer, Altium

Customers are invited to explore how the new solutions announced today can help their teams. Anyone can sign up to explore the Hexagon technology ecosystem, with dozens of new Apps, Solutions, and Portal features and localisations coming to Nexus on a monthly basis over the next year as part of a committed and long-term roadmap. Learn more today at nexus.hexagon.com

Learn more about Nexus by watching the virtual Nexus launch event today (Thursday, February 23rd) at 4PM GMT. Register for the event by visiting:

<https://hexagon.com/resources/events/the-future-of-manufacturing-is-opentour>.

HOOPS 2023 Toolkits Deliver Improved Simulation, Analysis and Photo-Realism

16 February 2023

Tech Soft 3D, the leading provider of engineering software development toolkits, announces the release of the HOOPS 2023 industry-leading 3D software development toolkits (SDKs) that power world-class engineering applications across the globe and multiple industries.

The enhancements to the 2023 toolkits focus on enhanced format support to provide partners and customers unprecedented access to engineering and manufacturing data. Improved

support for physical materials helps increase photo-realism in graphic display of 3D objects in both artificial and natural environments. Support for material clearcoat is now supported across all toolkits, enabling the visualization of a protective layer over a solid material or finish to exhibit shininess, reflection, and depth of color.

One of the main new features across all HOOPS toolkits is support for Microsoft Visual Studio 2019, protecting partners' investment in adopting the HOOPS product suite as the supporting technology stacks evolve. This update allows partners to adopt more modern compiler and language features like C++17 in the Windows compiler. With HOOPS SDKs, developers are able to reduce product development costs and bring desktop, web and mobile applications to market faster.

“Technology continues to advance at a rapid pace, and our team is laser focused on making sure that our partners have the most sophisticated, robust and high-performing component technologies that will enable them to create the applications they need quickly and easily,” said Eric Vinchon, Vice President of Product Strategy at Tech Soft 3D. “Staying ahead of trends and getting to market faster than competitors is the main priority of our partners, and Tech Soft 3D is the best-in-class engine for 3D graphics, CAD data translation and 3D data publishing that will enable our partners to deliver those applications.”

Enhancements to specific SDKs include:

HOOPS Exchange

- Timely **format updates** for both native CAD and standard formats so the applications our partners are developing can access the latest versions. Currently, Revit 2023 is supported with SOLIDWORKS 2023, NX 2212, Parasolid 35.0 and Solid Edge 2023 support planned for mid-February 2023.
- Improved Flexible elements support for **Creo**, several enhancements that improve the model fidelity by supporting more definition cases and positions;
- Support for assemblies suppressed parts and coordinates systems in **Autodesk Inventor** to help define references intended to be used in downstream manufacturing applications;
- Support of **SOLIDWORKS** K-Factors for sub-nodes to support more possible cases regarding how the K-factor is defined.
- [HOOPS Exchange 2023 Overview](#)

HOOPS Visualize

- Added support for **pixel and vertex shaders** provides developers with greater control over how geometry is rendered, enabling visualization of complex data sets and physical phenomena.
- Access support to spatial relationship data from **IFC files**. This is a critical component for many BIM workflows, such as Quantity Take Off.

- **Official Support for Apple Metal Graphics driver.** With Apple's depreciation of OpenGL, support for Metal has become critical for applications being developed and deployed on macOS and iOS.
- [HOOPS Visualize 2023 Overview](#)

HOOPS Communicator

- HOOPS Communicator 2023 now allows for separating the conversion of geometric and measurement data and enables the viewer to present 3D models sooner after conversion, while still allowing access to the full set of measurements when needed.
- The 2023 version of HOOPS Communicator includes enhanced conversion support for DWG drawing elements, resulting in a cleaner and faster model loading time.
- Support for 3Dconnexion's SpaceMouse, including the device's Object Mode and Camera Mode allowing for either object rotation or camera view rotation.
- [HOOPS Communicator 2023 Overview](#)

HOOPS Publish

- Enhanced PMI association and cross-highlighting support of RiPointSet as well as improved thumbnail generation resulting in improved performance in file conversion and loading.
- [HOOPS Publish 2023 Overview](#)

HOOPS toolkits are also available through the HOOPS Native and HOOPS Web Platforms. HOOPS Platforms combine market-leading 3D technologies for CAD data exchange, visualization and data publishing, along with tight connections to popular modeling kernels. With a single licensing fee, these offerings are the most cost-effective way to leverage the full spectrum of HOOPS functionality for both existing applications and future development projects.

Developers interested in evaluating HOOPS Platform can sign up for a free 60-day evaluation experience. Users can now interact with demos, videos, download a free evaluation, walk through tutorials, read partner success stories and browse the updated documentation, all in just a few clicks.

Infor Launches New Application to Combat Nurse Shortage for Healthcare Industry

21 February 2023

Infor®, the industry cloud company, announced the availability of Infor Clinical Science, part of the Infor Workforce Management suite. This application uses an evidence-based methodology to measure the workload of each patient, accounting for both direct and indirect workloads, to provide leaders with a complete picture of labor requirements for each shift, unit or department, all based on documentation already occurring in the electronic medical record (EMR). By measuring the workloads at the task/activity level, healthcare leaders will have deeper insights into work being performed and can adjust and adapt scheduling in real time to directly address and combat the ever-present healthcare worker shortage.

“Because of the nursing shortage, nurses (and other healthcare staff) are often asked to work overtime by staying longer for a shift or picking up extra shifts. At times, this is appropriate and many nurses enjoy the overtime, but this can also lead to exhaustion and burnout and create opportunities for errors. Leaders need to ensure they understand the schedules their employees are working and be protective of those who are working longer hours or picking up extra shifts to ensure they are getting adequate rest and the necessary support to provide safe patient care,” said Matt Breslin, Infor executive vice president and general manager. “With this application, we are now able to provide decision makers with a complete picture of up-to-date patient and unit staffing needs along with their available resources, so each unit is staffed. This ensures employees are deployed in an efficient manner across the organization.”

Clinical Science uses documentation already occurring in the EMR to give leaders insights into the patient care requirements for each unit across the organization. This helps decision makers deploy available staff in the most efficient manner possible to provide the needed patient care and deliver the necessary data in a single system to simplify this process. At the unit level, Clinical Science provides deep insights into each patient’s unique care needs and, by evaluating individual patient workloads, room proximity, and continuity of care, helps inform the nurse-patient assignment process to ensure fair and equitable patient assignments.

Clinical Science is also able to support departments with mandated staffing ratios. The application can help ensure the assignments are fair and equitable and can help leaders determine units or departments that may need additional support. No two patients are alike, and Clinical Science accounts for the differences between patients to ensure optimal patient care, while maintaining any mandated ratios. Compared to other tools on the market, Infor is now the only solution that offers an end-to-end experience deployed in a single cloud solution for healthcare labor planning and tracking, including alignment with patient workloads and the assignment of patients to nurses to ensure safe, high-quality patient care.

LOGIA WMS Expands with SaaS-Solution

20 February 2023

In the future, more businesses can benefit from LOGIA’s wide pallet of functionalities.

LOGIA is now available as a SaaS-solution, which enables the possibility to access the WMS-system in the Cloud and finance it through a subscription. Thereby, you can evade on-site deliveries and avoid the technical infrastructure inclusive maintenance.

Updates of the system are an integral part of the subscription. Through these, you are guaranteed the newest functions every two years to optimize the warehouse operation. The subscription is configured by the necessary LOGIA-modules, the desired number of users, and the infrastructure.

Newforma Outlook Integration Helps Project Teams Connect and Improve Communication

9 February 2023

Newforma, provider of Project Information Management (PIM) software for architects, engineers, contractors, and owners (AECO) worldwide, announces a new release of the Newforma Microsoft Outlook Add-in that allows users to effectively and immediately manage emails, RFIs, submittals and action items from any device.

With the updated Newforma email add-in for Outlook, project teams can create, file, and manage emails. Users can also accept RFIs, submittals and other action items directly from Outlook on their phones or other devices through the Newforma Outlook Add-in desktop client, website, or mobile app.

“The updated Newforma Outlook gives our users the ability to manage email wherever they are,” said Slater Latour, Chief Product and Marketing Officer for Newforma. “With this critical add-in, customers can ensure the entire project team remains connected and informed throughout the project lifecycle, regardless of their preferred technology or the device available to them at the moment.”

Newforma’s updated Outlook add-in empowers users and teams to:

- **File email as RFI or submittal:** Creating items based on the content of an email allows users to easily accept RFIs and submittals sent via email into Newforma.
- **File email as RFI or submittal response:** Users can complete the RFI and submittal workflow from Microsoft Outlook, saving valuable time lost logging into multiple systems.
- **Create an action item:** Instead of forwarding an email and asking the recipient to take care of it, teams can create, assign, monitor and update action items from Outlook.
- **File email to any Newforma project:** File emails to any Newforma project, whether it’s already added to the user’s project list or not. Newforma will suggest projects based on previous filing history.
- **File multiple emails:** Filing emails together can save quite a bit of time, especially for users who file in batches.

pSeven 6.43 Release

16 February 2023

DATADVANCE development team announces the release of pSeven 6.43, a new version of our platform for data analysis and optimization. Take a look what's new in the release below.

New Features

Train models with input and output constraints — in the Build model dialog in Analyze, you can now specify valid input ranges and output thresholds for selected input and output components.

- Specify input ranges if you want to limit the model’s input domain. The trained model will output NaN if the input point is outside the domain (any input is out of the specified range).

- Specify output thresholds when it is known beforehand that output values must be within a certain range — for example, the output represents a physical quantity that cannot get below 0 by definition. The trained model adjusts to those thresholds so its output values are always within the specified thresholds.

Model constraints: for an input component, specifies its valid range; for an output component, sets its lower and upper thresholds. Input constraints limit the model's input domain. The trained model will output NaN if the input point is outside the domain (any input is out of the specified range).

Output constraints are useful when it is known beforehand that output values must be within a certain range — for example, the output represents a physical quantity that cannot get below 0 by definition; in this case, 0 is the lower threshold. The trained model adjusts to such thresholds so its output values are always within the specified bounds.

Updates and Changes

- Predictive modeling: Removed the training data filter settings from the Build model dialog in Analyze as they are rarely used and may lead to confusion, since the actual training sample is not available in the report if you apply a data filter in the model training settings. It is recommended to use data filtering and export options in the Sample viewer instead.
- Uncertainty quantification block: In the reports generated by the FORM and SORM techniques, the convergence plot now uses logarithmic Y axis scale for better readability.

The pSeven 6.43 release also includes other bugfixes — please check the release changelog for a full list. You can also contact us to get more information and pSeven updates.

Wipro Lab45 taps into the power of blockchain technology to change the paradigm in digital identification and verification

22 February 2023

Wipro Lab45, the innovation lab of the leading technology services and consulting company, Wipro Limited, announced the launch of its Decentralized Identity and Credential Exchange (DICE) ID, which puts users in control of their personal data and enables faster, easier and secure sharing of private information online.

Powered by blockchain technology, DICE ID enables issuance and verification of tamper-proof, self-verifiable digital credentials. DICE ID stores verified personal information from certified issuers in an identity wallet owned by the user.

All data is encrypted and embedded and only received by the user in their own identity wallet. This digital wallet can be used to share identity or credentials for a wide range of purposes— including current or potential employers, healthcare or financial services providers, or educational institutions. DICE ID puts users in control of their personal data, enabling them to decide exactly how much and what type of information they want to reveal in digital settings.

“DICE ID leverages the core tenets of blockchain technology to transform the way consumers manage their online identities,” said **Subha Tatavarti, Chief Technology Officer, Wipro Limited**. “Current online identification relies on the use of single sign-on services, requiring users to share personal data with multiple third-parties. DICE ID gives the power back to the individual, making it easier and safer than ever to manage sharing of personal data on digital platforms. We believe decentralized identity and verifiable credentials technology will become a game-changer resulting in a metamorphosis of the identity space. And we are thrilled to be at the forefront of this innovative technology.”

DICE ID leverages W3C (World Wide Web Consortium) verifiable credential open data model, which makes credentials machine-readable and interoperable and allows for secure exchange between ecosystem players.

Piloted by select clients since September 2022, DICE ID is already being applied in many ways, particularly proving powerful in credential verification for talent/crowd sourcing purposes.

Among the use cases for DICE ID are:

- Ed-tech organizations, colleges, and crowdsourcing communities are using DICE ID to create a talent exchange ecosystem through portable skill credentials for learners and freelancers.
- Fintech and financial institutions are using DICE ID to handle user's consent and share their data while preserving their privacy and confidentiality.
- Health-tech startups are using DICE ID to safeguard medical data, enhancing patients' trust on their platform.
- Government-affiliated institutions are using DICE ID to help citizens prove their eligibility for benefits and other social schemes.
- Metaverse platforms are using DICE ID to create Sybil-resistant communities through pseudonymous identities for avatars.