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CIMdata News

CIMdata Releases Series of Country-Specific PLM Market Analysis Reports

29 September 2021

CIMdata, Inc., the leading global PLM strategic management consulting and research firm, announces the release of ten additional country-specific 2020 PLM Market Analysis Reports. These additional reports follow the release of the 2020 China PLM Market Analysis Report earlier this year.

The CIMdata PLM MAR series presents CIMdata's analysis of the 2020 product lifecycle management (PLM) market. The complete global analysis provides CIMdata's perspective on PLM across various industry and geographic sectors, identifies market trends, reviews investments in PLM-related software and services during 2020, and forecasts PLM investments for 2021 through 2025. It includes charts that present the overall PLM market and its various sectors as defined by CIMdata. These include collaborative Product Definition management (cPDm), tools and tools sub-sectors, Digital Manufacturing, and System Integrator/Reseller/Value-Added Reseller.

In addition to its global PLM Market Analysis reports, CIMdata offers eleven country-specific PLM Market Analysis Reports:

- Brazil
- China
- France
- Germany
- India
- Italy
- Japan
- Russia
- South Korea
- United Kingdom
- United States

These reports focus on the PLM market in each country, including its main segments and the 2020 financial results for PLM solution and service providers. Each country report includes estimates of spending by industry segment within the country, market presence within the country, growth of the top 10 suppliers in that country, revenue by global mindshare leaders, market shares in each measured segment, and five-year forecasts.

“2020 was a difficult year for the PLM Economy, as the global economy was gripped by the COVID-19 pandemic,” according to Stan Przybylinski, CIMdata's Vice President. “Overall growth was 3.8% globally, with most segments declining year-on-year. There were bright spots in some segments and some geographic regions. Based on 2021 results to date, the market is rebounding strongly during 2021, consistent with CIMdata's view that the underlying drivers for PLM growth, like Industry 4.0 and smart, connected products, remain strong despite the virus.

For the calendar year 2020, at \$9.97 billion, the United States is the largest market and is forecast to grow at a compound annual growth rate (CAGR) of 7.4% through 2025. Japan's PLM revenues were

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\$4.4 billion and a CAGR of 7.3%. PLM revenues in Germany were \$4.03 billion and a CAGR of 7%. These three countries have dominated the PLM market for years and will maintain that position. However, South Korea (at \$702.4 million and an 8.8% CAGR) and the emerging PLM economies of Brazil, China, Russia, and India have great potential. CIMdata estimates the 2020 PLM revenues in Brazil were \$271.5 million (7.8% CAGR), in India \$710.9 million (9.5% CAGR), and in Russia \$2669 million (6.1% CAGR).” Mr. Przybylinski continued, “For 2020, CIMdata estimates PLM revenues in France at \$1.7 billion with a CAGR of 7%, Italy at \$592.6 million and 6.9%, and the United Kingdom at \$1.24 billion and 7.1%.”

The CIMdata country-specific PLM Market Analysis Reports are available for purchase at www.CIMdata.com.

Onshape: Leading-Edge Collaboration PTC’s Cloud-Native CAD Platform – a CIMdata Commentary

28 September 2021

Key takeaways:

- Onshape optimizes the development process by providing advanced, instant collaboration between designers, suppliers, and product stakeholders.
- Users gain remote access to Onshape through a browser with no hardware restrictions.
- Onshape offers the agility to explore alternative design solutions.

Recently the world experienced a dramatic upsurge of web-based communication. Teachers leverage cloud-based tools to instruct their students; office workers meet in web-based meetings to conduct their business. Already a factor in industrial collaboration, cloud-based interaction solidified as the preferred mechanism for engineer-to-engineer and OEM-to-supplier information exchange. Yet, most industrial collaboration solutions only support asynchronous collaboration—a contributor posts information and a colleague at a later time accesses that information and responds in kind. An asynchronous collaboration solution, while useful, lacks the spontaneity found when two contributors meet face-to-face in a synchronous design session and their product ideas feed off each other. CIMdata has previously researched innovation and has published that, “There is substantial opportunity in the business of innovation to achieve better results more efficiently.” CIMdata believes the level of innovation that can be achieved in product design is heightened when designers work together to share their ideas.

If unable to work in person, two geographically separated product designers or a company design engineer and a supplier, the leading-edge solution is to have both working on and seeing the same product model at the same time. PTC’s [\[1\]](#) Onshape CAD design solution provides just such an environment. Onshape was developed to run in the cloud and allow more than one designer to concurrently work on the same model and immediately see the interactions of each other. CIMdata sees Onshape’s ability to have multiple designers work on the same model as a leading factor in design collaboration.

Onshape

Onshape was founded in 2012 by CAD veterans Jon Hirschtick and John McEleney, both Solidworks CEOs. Mr. Hirschtick founded Solidworks when he recognized the technology wave of personal computers was gaining ground in the industry. Once Solidworks was acquired the two shifted their focus to the current technology wave of the cloud and Software as a Service (SaaS). The Onshape solution is a SaaS product that makes use of cloud computing with compute-intensive processing and rendering

CIMdata PLM Industry Summary

performed on secure AWS cloud servers. Users interact with the software via a web browser or the iOS and Android apps. This reduces the need for any IT (information technology) support and allows remote access to Onshape with no hardware constraints. CIMdata recognizes this as a strength in that Onshape users can work from anywhere, at any time, on any device. PTC acquired the company in 2019 when they too saw the technology wave of cloud-based software building momentum. CIMdata sees the acquisition as a strategic move for PTC to take advantage of the growth opportunities for CAD in the cloud.

Innovation and Collaboration

Arguably few truly innovative products are the brainchild of a single individual. More likely two or three design engineers working together in a robust give-and-take of ideas produce new product ideas. Onshape provides for this possibility. Not only does Onshape allow multiple individuals to collaborate concurrently on a single shared design with live chat and commenting, but the solution also supports the concept of branching and merging alternative design directions. The team can create a version of the model with experimental branches off a core design.

By generating a branch off the current version of the product model (Figure 1), the users can create a workspace independent of others working on the model. They can then experiment with their ideas making alterations to the design without impacting others. By seeing the changes one designer makes, they can build on it with their own proposals. At any time the team can return to an earlier stage of the model if needed or merge the best elements from their multiple alternative designs together. CIMdata realizes this synchronous design capability is a major win for users and design innovation.

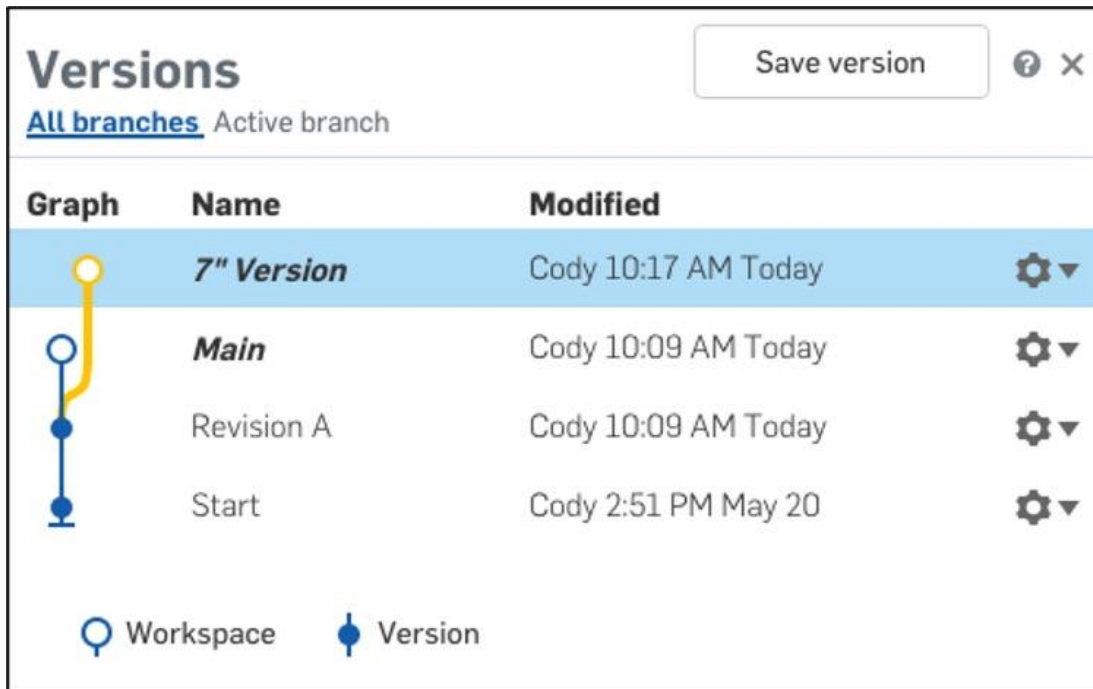


Figure 1—An Example of Branching in Onshape (Courtesy of PTC)

Onshape offers similar benefits for companies working with suppliers. A manufacturing company can invite a supplier into the product model workspace and point out any subtle issues in the overall product assembly. The company designers and supplier representatives can discuss and pinpoint potential concerns they have for the supplier built component or subassembly. That level of communication helps accelerate the overall product development process.

Summary

The cloud has become the medium of information exchange around the world. The manufacturing industry is increasingly leveraging the cloud for their design environment and when working with their supply chain. Onshape's positioning as a SaaS product running in the cloud is well positioned to satisfy those needs. CIMdata also believes that Onshape's ability to have multiple designers work together and see each other's progress can foster a level of innovation that will richly reward those companies that take advantage.

[1] Research for this commentary was partially supported by PTC.

Acquisitions

Accenture Completes Acquisition of umlaut

1 October 2021

Accenture has completed the acquisition of umlaut, an engineering consulting and services firm headquartered in Aachen, Germany. Terms of the transaction, which Accenture announced on June 14, were not disclosed.

The move significantly scales Accenture's deep engineering capabilities to help companies use digital technologies like cloud, artificial intelligence and 5G to transform how they design, engineer and manufacture their products as well as embed sustainability. Umlaut adds more than 4,200 industry-leading engineers and consultants across 17 countries to Accenture's Industry X services and expands the company's capabilities across a range of industries, including automotive, aerospace & defense, telecommunications, energy and utilities.

Hexagon enhances materials management capabilities with the acquisition of Jovix material tracking solution

29 September 2021

Hexagon AB, a global leader in digital reality solutions, announced the acquisition of the Jovix software and services business from Atlas RFID Solutions, LLC of Birmingham, Alabama, USA. Jovix is an award-winning material tracking software developed specifically for the construction industry, providing project decision-makers with real-time, actionable data regarding material status and location.

The cloud-based, IoT-enabled, mobile, configurable workflow platform offers visibility and traceability into the status and location of materials throughout the Engineering, Procurement, and Construction (EPC) lifecycle. This streamlined process, coined "Material Readiness" by Jovix, ensures construction crews have required materials without delay to complete their work according to plan. This is achieved by fully digitizing the supply chain to provide real-time, geo-contextual, and relational visibility from fabrication to installation.

Jovix combines web-based server software with information from multiple types of sensor tags and readers to automate previously manual, paper-based data collection workflows about the status and location of material as it moves throughout the construction supply chain. The software has been deployed in 25 countries on more than 650 job sites, including multibillion-dollar oil and gas and chemical construction projects. There are currently more than 7,500 Jovix users worldwide.

"The acquisition supports our continued expansion into the procurement, fabrication, and construction

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market,” says Hexagon President and CEO **Ola Rollén**. “By removing impediments to productivity that result from material management issues intending to reduce material wait times to zero, Jovix provides value for owner-operators, EPC firms, contractors, fabricators, and suppliers.”

Jovix will be fully consolidated as of 1 October, operating within Hexagon’s PPM division. The acquisition has no significant impact on Hexagon's earnings.

Sandvik completes the acquisition of leading CAM software company CNC Software Inc., creators of Mastercam

30 September 2021

Sandvik has completed the previously announced acquisition of US-based CNC Software Inc., a leading provider of CAD/CAM software solutions for manufacturing industries and the company behind Mastercam, the most widely used Computer Aided Manufacturing (CAM) brand in the industry.

In 2020, the company had revenues of approximately USD 60 million with an EBIT margin of 25-30 percent, and of which the share of recurring revenue was approximately 60 percent.

CNC Software will be reported in the Design & Planning Automation division within Sandvik Manufacturing and Machining Solutions.

Company News

Altair Launches Consortium to Accelerate World-class Altair Material Data Center for Engineers and Designers

30 September 2021

Altair, the global leader converging simulation, HPC, and AI, is proud to announce the Altair® Material Data Center™ consortium, designed to help make the Altair Material Data Center (AMDC) a best-of-breed materials information resource to support innovative product design and manufacturing.

The development of sustainable, efficient, minimum weight designs requires accurate, multi-domain material properties and the selection of these materials is a vital step in product development. Launched in 2020, the AMDC furnishes users with the material properties they need for tasks such as virtual prototyping and simulation. It enables designers, engineers, and scientists to browse, search, and compare materials in a standalone application or through the interface of their simulation and optimization tools.

The AMDC consortium will shape the growth of this cloud-based database, which gives engineers and designers instant access to accurate data on a vast array of metals, plastics, and composites for use with their computer-aided engineering (CAE) applications.

“We are delighted to welcome industry leaders such as Nikola Motors and the National Institute for Aviation Research to the consortium,” said Stephanie Buckner, senior vice president of customer engagement and corporate development, Altair. “Members will play a central role in driving AMDC, maximizing its value to engineers and designers as they pursue new engineering challenges.”

Consortium members will share real-world experiences and best practices, and work to ensure the AMDC roadmap accurately reflects their needs. By enhancing the breadth and scale of the AMDC, they will make a valuable contribution to an asset that serves engineering and manufacturing communities worldwide.

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In addition to providing strategic guidance, organizations serving on the consortium's steering committee will benefit from early access to the latest software and innovations from Altair.

"The foundation of predictable CAE structural simulations lays in the proper definition of standardized building block testing procedures for material characterization and processing the experimental data into verified and validated CAE material cards," said Dr. Gerardo Olivares, director and senior research scientist at the Wichita State University's National Institute for Aviation Research. "NIAR's Advanced Virtual Engineering and Testing research group is proud to be a steering committee member of Altair's Material Data Center consortium."

Altair Names Neilsoft Channel Partner in India

24 September 2021

Altair, the global leader converging simulation, HPC, and AI, signed a new channel partner agreement with Neilsoft, based in Pune, India, to further expand Altair's data analytics and AI presence in India. Neilsoft will manage sales and support responsibility for Altair's data analytics and AI portfolio through its pan-India presence, including offices in Delhi, Mumbai, Bangalore, Ahmadabad, Chennai, and more.

"We are excited to add Neilsoft to our channel partner community in India," said Vishwanath Rao, country manager and managing director – India, Altair. "Our collaboration will help us address the needs of this fast-growing market and we are confident that Neilsoft's experience, manpower, and expertise will support the growth of data and AI-based solutions in the Indian market with Altair technologies."

Founded in 1993, Neilsoft is an engineering technology solutions and services company serving clients in the manufacturing, process, and architecture, engineering, and construction (AEC) segments. It provides various solutions for engineering design, simulation, document management, enterprise-wide collaboration, and project management. Neilsoft will leverage its multi-disciplinary and multi-sectoral engineering experience and expertise, skilled workforce, and established partnership networks to further expand access to Altair's data analytics and AI solutions.

"As an engineering technology solutions and services company, we see data analytics tools as a core requisite for addressing multiple business needs and challenges. Altair's data analytics and AI solutions are flexible, easy-to-implement, and highly innovative, which will help us meet the needs of our customer base, while offering significant value for their businesses," said Raghuram NM, president – engineering solutions, Neilsoft. "As part of our strategic growth plan, this collaboration will help us reach a larger section of this high growth market. Our team is excited and looking forward to playing a key role in the development of the data analytics and AI solutions market in India."

Capgemini and Efma announce winners of the Financial NewTech Challenge 2021

29 September 2021

Capgemini and Efma announce the winners of the Financial NewTech Challenge 2021. The competition, which recognizes and rewards the most innovative financial NewTechs along with the top collaborations between NewTechs and financial institutions, concluded with a special online ceremony held on September 28.

The challenge is powered by FinTechVisor, a global platform developed by Efma and Capgemini, that enables FinTechs, InsurTechs, RegTechs and Financial NewTechs to showcase their B2B solutions, as well as empowering them with an interactive matchmaking tool to foster new partnerships with financial institutions.

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“Since its launch in May 2018, the FinTechVisor portal has developed into a strong and vibrant community of the most innovative FinTechs around the world,” said John Berry, CEO of Efma. *“The submissions for the 2021 edition demonstrated a clear focus on sustainability and show a shifting of priorities in the industry. These companies are the future of financial services and we look forward to continuing to cultivate a platform where FinTechs can showcase the strength of their propositions and benchmark them against their peers.”*

“At Capgemini, we strongly believe that the future of financial services relies on effective collaboration between traditional firms and StartUps: traditional firms’ need for digital agility and StartUps’ need for scale compels mutually beneficial partnerships,” said Elias Ghanem, Global Head of Market Intelligence for Capgemini’s Financial Services. *“As the StartUp ecosystem orchestrator, strongly supporting our clients’ continuous needs for innovation, we are proud to unveil the Financial NewTech Challenge 2021 winners.”*

Following 306 submissions – a 47% increase from 2020 – from almost 150 financial institutions around the globe, 1,700 votes were cast to determine this year’s impressive winners. One StartUp[2] and one ScaleUp[3] was selected from each of the four categories: Banking, Payments, Wealth Management, and Insurance along with a final category recognizing the top Financial NewTech Collaboration. Winners were announced during the online event to an audience of key decision-makers, senior executives, and major sector players within the industry. They are as follows:

- Unbanked (USA) – Banking StartUp. A global solution built on blockchain that enables people to be in control of their money by expanding the utility of cryptocurrency for investing and everyday purchases like never before.
- Credolab (Singapore) – Banking ScaleUp. An alternative credit scoring model that leverages previously untapped behavioral data in order to make credit available to worthy but sometimes overlooked people.
- Invoice2RTP – charlieIndia (Hungary) – Payments Startup. The solution enables banking customers to generate a payment request from invoice data, manage RTPs in one place, and automate invoice and payment data reconciliation.
- Optipay (Germany) – Payments ScaleUp. A unique solution that uses bank account data and its applicability for every industry to provide end-customers with personalized value-added products and services in return for their data to save time and money.
- AlgoDynamix (UK) – Wealth StartUp. Developed through many years of research at the University of Cambridge, AlgoDynamix’s analytics combine advanced mathematics and real-time order book data to produce directional market movement insights.
- Raisin (Germany) – Wealth ScaleUp. The first ever cross-border online savings marketplace in Europe and the only such platform present across the EEA and the UK, Raisin is breaking down barriers to better saving and investing.
- StoneStep AG (Switzerland) – Insurance StartUp. An emerging market embedded microinsurance product that brings “Microinsurance as a Service” to global partners, enabling mobile network operators and retailers to easily diversify their services and generate additional revenue.
- dacadoo Wheel of Life (Switzerland) – Insurance ScaleUp. An offer that delivers an engaging experience in which users are able to measure and quantify their physical and mental health across seven different areas. The Health Score is a scientific, tangible solution to measuring

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holistic health, based on over 300 million people years of clinical studies.

- Kasikornbank (Thailand) + LINE Corp. (Japan) – LINE BK is the first true social banking experience in Thailand. LINE BK is the only bank that seamlessly integrates into the LINE platform. It allows Thai consumers to access all of their financial services in a highly context-driven manner

The winners were selected by a jury of experts (75% weighting of the vote) and online voting accessible to both financial institutions and NewTechs (25% weighting of the vote), according to four criteria: business potential, originality, impact, and wow factor.

During the same event, Efma and Capgemini published the “Efma-Capgemini Financial NewTech Watchlist 2021,” which groups the top 100 StartUps and ScaleUps worth observing closely as they help in reshaping the financial services industry landscape in the years to come.

Capgemini pledges to plant 20 million trees by 2030 in support of its commitment to a sustainable planet

24 September 2021

Capgemini announced its commitment to plant 20 million trees by 2030 as part of the World Economic Forum (WEF) Trillion Trees Movement. As a leading responsible company, the Group has made a commitment to be carbon neutral by 2025 and net zero by 2030.

While Capgemini’s first priority remains focused on reducing its carbon emissions, in order to reach carbon neutrality, residual emissions will need to be offset through high-quality carbon offsets such as re-forestation. In this context, Capgemini joined the WEF’s Trillion Trees Movement in February 2021 to conserve, restore, and grow one trillion trees around the world, and today is making a commitment to plant a further 20 million trees by 2030. This commitment is consistent with the Group’s carbon reduction goals, which have been validated by the Science Based Target initiative (SBTi) as being in line with 1.5°C climate science.

This commitment to forestation builds on Capgemini’s existing tree-planting initiatives, with the Group celebrating on 31st August the planting of its millionth tree in India in just over a year, as part of the “Mission Million Trees” initiative. Moreover, the Group also launched the “Capgemini Forest” in 2019, an initiative inviting individuals and companies to plant trees with our partner Ecologi. More than 310,000 trees have already been planted in the “Capgemini Forest” through this program.

“We are more focused than ever on meeting our net zero objective, and today we are making an ambitious commitment in terms of carbon offsetting through reforestation”, said Shobha Meera, Chief CSR Officer at Capgemini and member of the Group Executive Committee. “We are inspired by the engagement of our partners of It.org and are looking forward to building together a more sustainable future.”

Capgemini’s pledge will be recognized at the Global Citizen Live, on September 25, a global event broadcast live for 24 hours with shows and performances to fight against poverty and climate change.

Capgemini is currently accelerating its Group-wide program to meet its net zero commitment, covering emissions from energy, travel, commuting, supply chain, waste and water. The Group is currently switching to 100% renewable electricity (as part of the RE100 initiative), and is transitioning to a fully hybrid and electric vehicle fleet (as part of the EV100 global initiative). As a global leader in digital transformation, Capgemini has also launched sustainability offerings as part of its commitment to help its clients reduce their carbon footprint.

CEO SUCCESSION AT CENIT

28 September 2021

Peter Schneck is to join the Management Board of CENIT AG and will assume the position of CEO on January 1, 2022. As planned, the outgoing CEO Kurt Bengel will leave the company at the end of 2021.

On May 27, 2021, CENIT announced that current CEO Kurt Bengel will leave the company at the end of the year. A successor has now been determined: On October 18, 2021, Peter Schneck will join CENIT AG as member of the Management Board and will assume the position of CEO on January 1, 2022.

Born in 1971, Peter Schneck studied law at Bonn University (Major: International Business Law) and completed an MBA at the University of Reading, UK. During his career, Peter Schneck gained broad management experience, often at the helm of large, internationally active corporations. For example, he acted as Managing Director of Scheidt & Bachmann, a leading global provider of IT solutions for parking management, and later as Managing Director of car park and transport company APCOA. Following his move to Trapeze Group, a leading software provider for transport engineering owned by Canadian-based Constellation corporation, Peter Schneck headed the company as CEO from 2014 to 2019. In 2019, he joined the Management Board of DATAGROUP SE, where prior to his move to CENIT he was responsible for mergers & acquisitions, investor relations and legal affairs.

“We are convinced that in Peter Schneck we have found an internationally experienced and highly qualified successor for the position of Chief Executive Officer of CENIT AG. Peter Schneck has an impressive track record, particularly in the fields of international sales organization, software business generation and value-adding company acquisitions”, says Rainer-Christian Koppitz, Chairman of the Supervisory Board of CENIT AG.

In close collaboration with CENIT’s current CEO Kurt Bengel, Peter Schneck will be onboarded in all task fields over the coming months and will introduce himself to all major clients, partners and suppliers – guaranteeing a smooth transition to his role as new company CEO as of January 1, 2022.

“I am pleased to be able to welcome Peter Schneck to the global management team of CENIT as my successor and as a competent colleague. I wish Mr. Schneck every success in his position as future CEO of CENIT and all the best in his personal life”, says CEO Kurt Bengel in welcoming the decision of the Supervisory Board.

Kurt Bengel will resign his position as CEO on December 31, 2021 and leave the company after more than 33 years with CENIT. A graduate engineer, Kurt Bengel joined CENIT on July 1, 1988 as the very first employee. He joined the Management Board on January 1, 2007 and has acted as CEO of CENIT AG since July 31, 2012.

In his 15 years at the helm of the company, Kurt Bengel focused his energies on boosting the strategic and operative strength and ongoing development of CENIT Group. Under his guidance, the company saw profitable and significant organic and inorganic growth, most recently as a result of the acquisition of French software provider KEONYS S.A.S. (2017), virtual product development specialist SynOpt GmbH (2019), and the launch of new CENIT business ventures such as the new presence in China (2021). In 2019, Kurt Bengel and the Management Team launched the “CENIT 2025” program as a pioneering strategy package for securing and further expanding CENIT’s market position.

“The Supervisory Board honors Kurt Bengel’s many years of service to CENIT’s success, his high level of expertise and his extraordinary personal commitment to this cause. We wish to express our deep gratitude for his dedication and wish him the very best in his future endeavors. Or, to be absolutely

clear: Without Kurt Bengel, CENIT would not exist in its present-day size and orientation”, says Rainer-Christian Koppitz in the name of the company.

Dassault Systèmes to Unveil Its Next “Design for Life” Installation at London’s Design Museum

28 September 2021

Dassault Systèmes announced the next installation in its “Design for Life” program of collaborations with groundbreaking designers around the world, Aurora by Arthur Mamou-Mani and Dassault Systèmes. Aurora is an interactive manifestation of the power of uniting design, science and industry to collaboratively imagine and create sustainable innovations that harmonize product, nature and life. Aurora will be showcased in London during the opening weeks of the **Design Museum’s Waste Age exhibition** from October 23, 2021 to coincide with the **26th United Nations Climate Change Conference of the Parties (COP26)** in Glasgow.

This most recent “Design for Life” collaboration was initiated two years ago as an experimental research project into the use of upstream thinking – a design approach and process that makes regeneration a requirement of every project – and Dassault Systèmes software, to demonstrate the principles of circular innovation. Aurora is the culmination of that research: an experiential installation made of modules that can be crushed, melted and reformed, in a continuous process of reinvention and rebirth.

“Aurora celebrates a new dawn in the wake of the worldwide trauma of the global pandemic,” said Arthur Mamou-Mani, Architect. “As designers, architects and engineers, we can now come together to create shared experiences, rather than fixed projects, empowering people with the means of both production and creativity.”

From material selection to design and fabrication, Aurora signals the end of the take-make-waste era and the dawn of built environments conceived for regeneration with an inclusive approach that weaves together knowledge and know-how from multiple disciplines. Following a molecular-level analysis of different materials, bioplastic Polylactic Acid (PLA) – a non-toxic thermoplastic derived from plants, which can be 3D-printed, assembled, recycled and printed again in a continuous, closed loop – was selected. The team used Dassault Systèmes’ 3DEXPERIENCE platform on the cloud to collaborate and create a virtual twin experience of its artwork in a virtual space that precisely replicates the Design Museum of London atrium.

“The intent for this collaboration was to realize the installation through a process that was holistic, integrative and exploratory,” said Anne Asensio, Vice President Design Experience, Dassault Systèmes. “By questioning every aspect of its production and lifecycle, from a detailed assessment of the environmental impact of the material through to the possibilities for disassembly and reuse, we wanted to bring the audience along a journey that questions how we may design and create habitats in the future.”

This means replacing top-down, data-driven city planning with new urban narratives and allowing citizens to contribute to more sustainable cities.

With high-impact photorealistic visuals, the team experienced the installation’s appearance in this virtual space at different times of day, as light, shadows and airflows change the environment. It was able to imagine, experiment, design, optimize, test, visualize and refine its creations virtually and in parallel before consuming any physical materials, and evaluate the sustainability of every choice. This ensured that it achieved the project’s objectives and delivered an optimized experience that demonstrates a world in which every “made” object – from home and lifestyle to mobility and cities – is imagined,

invented and manufactured for sustainability.

In this “decade to deliver” a 50% reduction in global CO2 emissions, experts in design and science must converge and collaborate to envision a new, unified practice for sustainable models to support a planet having limited resources. The 3DEXPERIENCE platform allows them to collaborate and use technologies including virtual reality, 3D modelling, simulations and generative design in a virtual universe that unifies their disciplines, facilitates understanding through the universal language of 3D, and eases the complexity of sustainability decision-making, from the molecular level to manufacture and end-of-life reuse/recovery/recycling, for more ethical and more sustainable design.

Initiated a decade ago, “Design for Life” is an ongoing program to explore how science and technology can empower designers to build a better, more sustainable world. Previous collaborations have included Kengo Kuma, Thom Mayne and Patrick Jouin.

HCL Technologies and Proximus Announce Strategic Partnership to Launch Hybrid Next-Generation Cloud Portfolio for Benelux Market

29 September 2021

HCL Technologies (HCL), a leading global technology company, has signed a multi-year strategic partnership with Proximus Group, Belgium’s leading digital services and communications solutions provider, to transform its data center business and create a resilient digital foundation.

HCL will help Proximus and its internal business achieve a significantly higher flexibility and reliance as the foundation to drive future business innovation and accelerate growth in the Belgium and Netherlands market. HCL will launch a Hybrid Next-Generation Cloud portfolio to support Proximus’ large customer base and more than 11,000 employees. In addition, the Benelux region’s mid-market and government businesses will gain access to joint solution offerings from HCL and Proximus.

The deal furthers Proximus’ commitment to “act for a green and digital society,” as the cloud platform will use the latest green data center technology to minimize its CO2 footprint. HCL will invest in a dedicated innovation lab, providing Proximus with exclusive access to its IP, product and partner ecosystem. This will enable Proximus to use HCL’s extensive telecom and technology domain expertise to develop innovative 5G, Edge and IoT solutions. Together, HCL and Proximus will leverage the innovation lab to upskill employees in AI-led operations, automation, agile infrastructure management and cloud-native development.

“I am very pleased with this agreement between Proximus and HCL that will bring us economies of scale, knowledge, best practices, tools, experience and expertise,” said Guillaume Boutin, CEO of the Proximus Group. “This IT infrastructure partnership will not only allow us to assure the development of the best customer offer, but it will also make sure that we’re able to retain strong strategic influence in the cloud domain.”

“This is a groundbreaking collaboration between HCL and Proximus,” said C Vijayakumar, CEO and Managing Director, HCL Technologies. “Together, we look forward to developing a competitive cloud environment and digital offerings for the Belgian market. HCL’s investment in a dedicated lab will not only drive innovation and growth at Proximus, but it will also support its endeavors to develop the next generation of digital talent in Belgium.”

“Our strategic partnership with Proximus builds upon our longstanding relationship and underscores

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HCL's commitment to the Benelux region," said Ashish Gupta, Senior Corporate Vice President and Head of EMEA, HCL Technologies. "We are excited about the joint go-to-market opportunities the partnership presents. The next-generation cloud platform will give us a true market advantage, enabling us to offer a portfolio of futuristic and competitive cloud offerings to clients."

HCL Technologies Joins AWS Service Delivery Program, Becomes AWS Contact Center Intelligence Partner

28 September 2021

HCL Technologies (HCL), a leading technology company and a Premier Consulting Partner of Amazon Web Services (AWS), has joined the AWS Service Delivery Program and become an AWS Contact Center Intelligence Partner.

The AWS Service Delivery Program is designed to validate AWS Partners that have a deep understanding of AWS services, demonstrated experience and proven customer success in delivering these services to customers. AWS Contact Center Intelligence (AWS CCI) solutions cover key areas of the contact center workflow: self-service, real-time analytics and agent assist, and post-call analytics. Each solution is created using a specific combination of AWS AI services and available through select AWS Partner Network partners.

HCL has also achieved the AWS Migration Consulting Competency, AWS SAP Consulting Competency, AWS DevOps Consulting Competency, AWS Mainframe Migration Consulting Competency, AWS Storage Consulting Competency, which make HCL an ecosystem partner with a broad range of offerings to support its clients across verticals irrespective of their technology landscape.

Joining these two programs allows HCL to transform its clients' end-to-end contact center ecosystems with AWS offerings across cloud, AI, omnichannel and ML technologies. HCL can now address transformation needs for its clients with both cloud and on-premises contact centers.

"This is a major milestone in our quest to build on the ecosystem of support we have for our clients that cater to a broad range of requirements across industries," said Kalyan Kumar, Chief Technology Officer and Head, Ecosystems, HCL Technologies. "In line with the #HCLCloudSmart approach, these dual programs build on our large, expansive portfolio of innovative cloud services, as we see a stronger shift toward digital-first, contact-less service experiences in the pandemic-driven economy."

HCL is a proven leader in customer experience transformation space with deep expertise in redefining customer journeys, self-service and agent interactions. It builds and provides enterprise cloud computing solutions on AWS. HCL has also released product-based offerings over Amazon Connect and AWS CCI solutions specific to industry verticals that help in accelerated client experience modernization.

iPoint becomes Catena-X member

29 September 2021

We are proud to announce that iPoint has been officially welcomed as a full member of the Catena-X Automotive Network e.V. The network, established in May 2021 by leading players of the vehicle industry, strives to create the conditions for the rapid and successful development of an open ecosystem to exchange information between companies in the automotive industry efficiently and securely. iPoint will actively participate in the Catena-X working groups to contribute our 20 years of experience in software development and integration for automotive manufacturers and suppliers.

The Catena-X Automotive Network addresses challenges such as resilience, sustainability, and

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geopolitics and is intended to be open to all companies in the European automotive industry as well as their global partners with the overarching goal to create standardized data and information flows along the entire automotive value chain. The focus is on benefits and added value for each participant in the network while maintaining data sovereignty in accordance with the standards of the European Union (GAIA-X).

As a starting point, ten use cases have been identified for the implementation of the Catena-X Automotive Network. iPoint will actively participate in the Catena-X working groups – in particular on the topics of sustainability, circular economy, and traceability –, having already identified these use cases as relevant in 2012 and researched them in the SustainHub project, funded by the Seventh Framework Programme of the European Commission (FP7). The project resulted in iPoint's cloud-based SustainHub platform, a universal hub which is used by approx. 61,000 users to exchange compliance and sustainability data along the supply chain. At Catena-X, we will explore how existing data could be re-used and which overlaps or interlinks exist, especially with the International Material Data System (IMDS), the worldwide material data system of the automotive industry.

“We are thrilled to be a member of Catena-X, the newly-established alliance for secure and standardized data exchange in the automotive industry. Indeed, iPoint and Catena-X share the same vision of a digital economy that can only be achieved through collaboration and secure, transparent data exchange,” states iPoint CEO and founder Joerg Walden, adding: “Since 2001, iPoint has been empowering companies to collect and analyze all necessary data to assess and report the environmental, social, and economic impacts of their products and related processes. We are looking forward to participating in the Catena-X working groups to contribute our software development and integration expertise tailored to the requirements of the automotive industry and to offer our solution know-how, especially in the fields of supply chain transparency, compliance with social standards, and carbon footprint detection.”

Schlumberger and AVEVA Announce Agreement to Advance Digital Solutions for Oil & Gas Production Operations

30 September 2021

Schlumberger and AVEVA announced an agreement to integrate edge, AI and cloud digital solutions to help operators optimize oil and gas production. The companies will work together to streamline how energy operators acquire, process and action field data for enhanced wellsite efficiency and performance. Initial focus of the collaboration includes linking edge systems to applications in the DELFI* cognitive E&P environment to better manage equipment health and optimize performance.

“This partnership brings together our edge and cloud solutions with the AVEVA PI System™ to seamlessly liberate access to data accelerating insights and action,” said Rajeev Sonthalia, president, Digital & Integration, Schlumberger. “By integrating our domain expertise, secure edge technology and digital applications in the DELFI environment with AVEVA, we will enable customers to increase efficiency and transform their production operations.”

“Digital transformation of critical infrastructure requires a strategic vision that transcends technology to drive efficiency, achieve profitable business outcomes and deliver sustainability,” said Andrew McCloskey, Chief Technology Officer, AVEVA. “Recent macroeconomic events have highlighted the need for agility throughout all industries. Our collaboration with Schlumberger will drive operational agility and engineering efficiency, while also enabling swifter delivery of new products and services to make assets and operations run more smoothly.”

The collaboration will bring to market the IoT and cloud capabilities of both companies. This includes

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the data management platform capabilities of the AVEVA PI System and Schlumberger domain expertise and analytics capabilities provided by Agora* edge AI and IoT solutions and the DELFI environment. The companies also plan joint technology integrations, sales and service support, and go-to-market activity.

Spirit of Wipro Run brings together participants from over 35 countries

26 September 2021

Wipro Limited, a leading global information technology, consulting and business process services company, organized the 16th annual ‘Spirit of Wipro’ (SOW) Run, drawing thousands of participants from over 35 countries to run together in spirit.

For the past sixteen years, Wiproites around the world have come together to celebrate Wipro’s core values. The annual SOW run aims to inspire employees to be responsible citizens of the world.

This year’s theme was “Together. To greatness,” inspired by the resilience demonstrated by Wiproites in a year of unprecedented disruption. Along with outperforming across all business parameters, Wipro teams have remained committed to supporting their colleagues and creating a lasting social impact across communities.

Like last year, this year’s race was also virtual, and runners strictly adhered to the local COVID-19 guidelines and safety protocols while participating in the event.

Even under these conditions, enthusiasm was high. Participants used the freely available Strava app to track their progress and keep connected with fellow runners around the world. Wipro also encouraged employees to share selfies and videos leading up to and throughout the day of the race, which the company curated and shared on internal channels and on social media.

Every year, all proceeds from the Spirit of Wipro Run are matched 100% by Wipro and is utilized by Wipro Cares, the community initiatives arm of Wipro Limited. In the past, these donations went primarily to support the education of disadvantaged children. In 2020, most of the proceeds were directed towards the pandemic relief efforts and will continue for this year as well. Through these contributions and the company’s larger community impact, Wipro continues to work towards its vision of creating a more equitable and sustainable society for all.

After participating in the event, **Thierry Delaporte, Chief Executive Officer and Managing Director, Wipro Limited** said, “Wipro’s commitment to progress goes beyond digital innovation and business transformation. The Spirit of Wipro Run is a testament to that. We are a global family driven by a shared commitment — that of supporting one another, of pursuing healthier futures, and giving back to our communities.”

Saurabh Govil, President and Chief Human Resources Officer, Wipro Limited said, “After such a humbling year, it is moving to see Wiproites across the world coming together, albeit virtually. The Spirit of Wipro Run embodies the values and culture that make us a resilient, purpose-driven organization. We believe the contributions from the event will help create a positive impact on local communities across the countries where we operate.”

Vectorworks, Inc. a Finalist in 2021 Construction Computing Awards

27 September 2021

Global design and BIM software provider Vectorworks, Inc. earns three nominations for the 2021 Construction Computing Awards. Vectorworks, Inc. and its product Vectorworks Architect have been

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named finalists in the BIM, architectural design and company recognition categories.

In its 16th year, the Construction Computing awards affectionally known as "The Hammers" are looking to showcase and reward the technology, tools and solutions for the effective design, construction, maintenance and modification of commercial buildings, residential and social housing and civil engineering projects of all sizes.

"We're honored to have this recognition of our efforts and commitment to the AEC industry," said Vectorworks UK Director of Customer Success Tamsin Slatter. "Innovation and performance enhancements drive our focus and the launch of Vectorworks 2022 demonstrates our commitment to investing in developments that deliver workflow freedom to designers and creators everywhere."

Vectorworks is nominated in the following categories:

- **BIM Software of the Year:** Vectorworks Architect
- **Architectural Design Software of the Year:** Vectorworks Architect
- **Company of the Year:** Vectorworks, Inc.

The awards are determined by voter submission and a panel of judges. Winners will be announced on Nov. 11 at the awards ceremony at the Leonardo Royal Hotel London City Hotel.

World's First FARO-Certified Forensic Science Lab Opens at George Mason University to Advance Hands-on Student Training and Research

29 September 2021

FARO® Technologies, Inc., a global leader of 3D measurement, imaging and realization solutions for the 3D Metrology, AEC (Architecture, Engineering & Construction), and Public Safety Analytics markets, announced a partnership with George Mason University in Virginia to create the world's first FARO-certified Forensic Science Research and Training Laboratory. As a direct result of the partnership, Mason's Forensic Science Program will soon become the first in the nation to offer a 3D course in crime scene documentation.

FARO has lent \$300,000 of hardware and software for use by students training in state-of-the-art forensic science technology. Students will also have the opportunity to work alongside law enforcement partners such as the George Mason Police, Fairfax County Police, Fairfax City Police and others, including the U.S. Army. Much of the research will be done at Mason's new five-acre Forensic Field Lab (the Body Farm), which offers transformative outdoor scientific training using human remains.

"FARO and George Mason University have a unique partnership based on the common goal of advancing the field of forensic science through innovative technology," said Alina Burroughs, FARO Senior Business Development Manager for Public Safety Analytics. "Our powerful laser scanning solutions allow investigators to document scenes, supplying more comprehensive data faster, resulting in more accurate analysis, identification of victims, and resolution of cases. We are proud to work together to build the next generation of forensic investigators through this shared vision and hope that this partnership will serve as a model to extend to other institutions in the future."

Forensic science has changed considerably over the years, with technology such as 3D scanning and reality capture now playing a critical role in the preservation of crime scenes so that investigators can continue to return to the virtual crime scene to evaluate evidence. By storing that information digitally, forensic investigators can review even the most minute details and share that information before returning to the crime as many times as needed. George Mason students will immediately benefit from that real-world taste and hands-on experience with the latest technology.

"This exciting FARO-Mason Forensic Science partnership is the first of its kind and the opportunities we can now give our students and develop with our external partners can only be imagined," said Mary Ellen O'Toole, a former FBI profiler who heads the Forensic Science Program within Mason's College of Science. "Whether a student is training in the new FARO Forensic Lab, learning how to process an outdoor scene at our Forensic Field Lab, measuring a murder scene inside the Crime Scene House or testifying in court as an expert witness, they will walk in the shoes of real forensic scientists and learn how to apply science and skills to get answers about how crimes are committed and how to solve them with the accuracy and precision of 21st-century technology."

Event News

ASCENT to Present and Showcase Courseware and Professional Writing Services at Autodesk University 2021

30 September 2021

At this year's global Autodesk University 2021 (AU) digital conference (October 5-14), ASCENT - Center for Technical Knowledge, an Autodesk Authorized Publisher and Developer, will showcase a range of learning options to maximize productivity, including its extensive library of courseware for Autodesk software. Another major focus will be services offered by ASCENT, including learning content development for engineering applications such as CAD and PLM tools, and technical editing and writing services for resources such as operations manuals, workflow procedures, and software help documentation.

"Autodesk University continues to be an event for which we circle the dates on our calendar each year because it gives us an opportunity to connect and collaborate with clients and partners around the world," says Paul Burden, director of product development, ASCENT. "At the digital event this year, we're excited to showcase our products—learning guides, instructor guides, and eLearning courses—while also highlighting our services that are a fundamental piece in the adoption of technology across an organization."

Instructional Demo with Live Q&A

On October 6 from 3-4 PM Eastern, veteran Autodesk University presenter and ASCENT's instructional design projects manager, Jennifer MacMillan, presents *Getting Started with Model States (CP500007)* covering critical how-to information for Model States functionality, which was introduced in the Autodesk Inventor 2022 software. Registration is required for this free on-demand presentation and its associated live Q&A session.

During the 30-minute presentation, attendees will learn how to:

- Use Model States in Inventor designs
- Create Model States in Part and Assembly designs
- Substitute Model States to simplify Assembly designs
- Use Model States in drawing and presentation files

ASCENT Exhibits in AU's Solution Marketplace

At the Solution Marketplace, ASCENT will host a virtual booth showcasing ASCENT's custom courseware and the professional writing and editing services that help organizations clearly communicate key product information to end users and internal audiences. Booth visitors can view the Autodesk 2022 Courseware Roadmap which includes over 60 software learning guides, including titles

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for AutoCAD, Autodesk Civil 3D, Autodesk Inventor, Autodesk Revit and Autodesk Vault.

Visit ASCENT Virtual Booth for a 15% Discount

Visitors to the booth will receive a special discount code that gives them 15% off ASCENT's Autodesk learning guides, instructor guides and eLearning bundles purchased during the month of October.

In addition to the content available at the virtual booth, ASCENT will also be inviting visitors to attend the upcoming educational webcast "Getting Started with Grading Optimizer" to be held on November 10, 2021. Registration is free, but advanced registration is required.

AVEVA to Unveil New Product Roadmap Following OSISOFT Integration

27 September 2021

AVEVA, a global leader in industrial software, driving digital transformation and sustainability, will host its first AVEVA PI World Digital conference October 19-21, 2021. The three-day virtual event will feature a compelling line-up of industrial technology leaders and decision makers who will share the latest in digital transformation and the role of artificial intelligence, cloud, digital twin, and the industrial internet of things in empowering the connected worker and unlocking sustainable value and growth. AVEVA will share its product roadmap and highlight how its solutions are shaping the future of industry.

AVEVA PI World Digital kicks off Tuesday, October 19 at 9am CET with a welcome from AVEVA CEO Peter Herweck and OSISOFT Founder and Chairman Emeritus, Dr. J. Patrick Kennedy. They will share how integrating PI System and AVEVA solutions unlocks Performance Intelligence, an industry-changing capability that combines data and AI-infused analytics to support the entire industrial lifecycle. Following their remarks, AVEVA's Executive Vice President of Operations Rob McGreevy will join Executive Vice President of Information Ronan de Hooge to share a new product roadmap for AVEVA, including updates to its portfolio.

"Now more than ever, companies need to digitize to drive resilience, agility and efficiency," said Peter Herweck, CEO, AVEVA. "AVEVA PI World Digital is where we will lay the foundation for what comes next in industrial digital innovation and showcase the solutions that are at the forefront of driving change for some of the world's largest companies."

A central focus of the event will be how digitalization is driving environmental and business sustainability. AVEVA proprietary research indicates that four in five leading industries are looking to increase their digital investments to drive sustainable business models. AVEVA's Chief Sustainability Officer and Chief Marketing Officer Lisa Johnston will host a panel on the potential of digital technologies to enable net-zero industries. Sustainability leaders from Microsoft, Schneider Electric, Orsted and Neste join the discussion to share how they are optimizing sustainable operations, enhancing safety and efficiency, minimizing emissions, and enabling digital resilience through a combination of AI-powered analytics and contextualized information.

Attendees at the virtual event will be able to choose from over 40 presentations, typically led by customers sharing their own real-world experience and advice using the PI System and other AVEVA products. The event also includes live Ask the Expert sessions, a virtual expo, and learning labs, as well as product and portfolio tracks that cover roadmap sessions with deep dives into PI System, cloud, engineering, operations, digital twin, and more.

Rockwell Automation Celebrates 30 Years of Automation Fair® November 10-11

1 October 2021

Rockwell Automation, Inc., the world's largest company dedicated to industrial automation and digital transformation, announces the opening of registration for its 30th annual Automation Fair event, to be held in Houston at the George R. Brown Convention Center, November 10–11, 2021.

Automation Fair showcases the newest products, solutions, and services in industrial automation and digital transformation. Attendees can experience innovations firsthand and talk to solution experts from Rockwell Automation and members of its PartnerNetwork™ companies.

“We’re excited to welcome you back as we celebrate 30 years of Automation Fair with the people who have made it all possible—our customers,” said Tina Dear, vice president, Global Marketing, Rockwell Automation. “This year we’ll feature everything you love, from engaging keynote presentations to interactive hands-on labs and technical sessions to industry-centric panel discussions, and our signature exciting show floor showcasing the latest exciting innovations and solutions from Rockwell Automation and members of our PartnerNetwork.”

Perspectives

Tuesday, November 9 kicks off with Perspectives, the highly anticipated keynote presentation where executive leadership from Rockwell Automation and industry experts share their visions for the future. Perspectives, previously a media-only event, will be available by livestream or in-person to every registered attendee this year.

Process Solutions User Group (PSUG)

Tuesday, November 9 also features the Process Solutions User Group (PSUG), an interactive, industry-leading event to gain greater insight into the latest process automation technologies. PSUG is held in conjunction with Automation Fair and provides a wealth of knowledge on control strategies, optimization, process safety, and batch automation including:

- Keynote presentations
- Ask the Experts sessions
- Customer sessions
- Hands-on labs
- Technical sessions
- Tuesday evening networking event

Immersive Exhibits

This year's show floor features a new, interactive, and curated experience, including an exhibit that brings one customer's manufacturing story to life, and over 100 exhibits from Rockwell Automation and members of its PartnerNetwork. The show floor will bring the technologies alive through hands-on demos and activities, with experts on hand to discuss the newest solutions.

Hands-on Labs and Training Sessions

Over 90 product and technology sessions and hands-on labs will be offered to help conquer the biggest challenges facing Rockwell customers. These sessions and labs are presented by experts from Rockwell Automation and PartnerNetwork members. Space is limited and registration is required to attend the sessions and labs in-person.

Industry Forums

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The event will also showcase 10 industry forums, featuring panel discussions from leading industry experts, including Automotive and Tire; Chemical; Decarbonization and Emerging Energies; Food and Beverage; Life Sciences; Metals, Mining and Cement; OEM; Oil and Gas; Power and Energy; and Water Wastewater.

With health and safety as a top priority, it is the goal of Automation Fair to deliver the safest in-person experience possible. Whether participants elect to attend in-person or virtually, they will experience the value and power of Rockwell's IT/OT expertise and have more opportunities than ever before to network with innovation experts, company executives, thought leaders, and industry peers.

Financial News

Altair Announces Private Placement Financing of \$200 Million from Matrix Capital Management Company LP

27 September 2021

Altair, a global technology company providing software and cloud solutions in the areas of simulation, high-performance computing, data analytics and artificial intelligence announced a private placement financing of \$200 million from Matrix Capital Management Company LP, one of the Company's largest stockholders, in exchange for 2,935,564 shares of its Class A common stock. Per the terms of the agreement, the shares will be subject to a 1-year lockup period.

"Matrix has long admired Altair's innovative technology portfolio and world-class leadership team, and we believe the business is at a critical inflection point," said David Goel, Managing General Partner of Matrix Capital Management. "As companies around the world exit the pandemic, the pressure on engineering teams to release new products and services has significantly intensified. Altair's solutions are well positioned and critical to modern product development and innovation. We are excited to partner with Jim Scapa and his team to help support Altair's next phase of growth."

"We sincerely appreciate Matrix's continued commitment to our ongoing success," said James Scapa, Founder, Chairman and Chief Executive Officer of Altair. "This additional working capital will help us continue delivering outstanding products and services to our customers."

The securities to be sold in the private placement have not been registered under the Securities Act of 1933, as amended (the "Securities Act"), or any state or other applicable jurisdiction's securities laws, and may not be offered or sold in the United States absent registration or an applicable exemption from the registration requirements of the Securities Act and applicable state or other jurisdictions' securities laws. The Company has agreed to have a registration statement with the U.S. Securities and Exchange Commission (the "SEC") registering the resale of the shares of common stock issued in the private placement declared or deemed effective by the SEC no later than the one-year anniversary after the closing of the private placement.

This press release shall not constitute an offer to sell or the solicitation of an offer to buy these securities, nor shall there be any offer, solicitation or sale of these securities in any jurisdiction in which such offer, solicitation or sale would be unlawful. Any offering of the securities under the resale registration statement will only be made by means of a prospectus.

Velo3D Debuts on the New York Stock Exchange Under “VLD” Ticker Following Merger with JAWS Spitfire Acquisition Corporation

30 September 2021

Velo3D, Inc., a leading additive manufacturing technology company for mission-critical metal parts, has announced shares of its common stock have begun trading on the New York Stock Exchange under the ticker symbol “VLD” following its merger with JAWS Spitfire Acquisition Corporation (“JAWS Spitfire”). The combined company will now operate as Velo3D and will be led by CEO and Founder Benny Buller. The merger provides Velo3D with a total of \$274 million in capital to fuel the company’s next stage of growth.

“Becoming a public company is a significant milestone for Velo3D, however, this is merely a means to help us with what our team aims to accomplish,” said Benny Buller, CEO and Founder at Velo3D. “Velo3D’s end-to-end additive manufacturing solution is redefining what’s possible for the production of mission-critical metal parts. We will continue to push the limits of additive manufacturing technology so our customers can innovate without compromise. I would like to thank the entire Velo3D team for making all of this possible.”

Since its production launch in the fourth quarter of 2018, Velo3D’s revenue grew from \$2 million in 2018 to \$19 million in 2020. The company’s Sapphire[®] XC system, which will begin shipping in Q4 2021, has a backlog of orders and pre-orders exceeding \$80 million.

Velo3D’s end-to-end additive manufacturing solutions are utilized by some of the most innovative companies in the world, including SpaceX, Honeywell, Boom Supersonic, Chromalloy, and Lam Research. These customers use Velo3D’s technology to transform their manufacturing processes by reducing complex products down to single parts with better performance and less overall weight. Mission-critical parts can also be produced at a fraction of the time and cost of legacy manufacturing approaches.

Implementation Investments

Bananain Chooses Centric PLM to Drive Category Expansion

27 September 2021

Bananain, the innovative underwear company, has selected Centric Software’s Product Lifecycle Management (PLM) solution. Centric Software provides the most innovative enterprise solutions to plan, design, develop, source and sell products such as apparel, footwear, sporting goods, furniture, home décor, cosmetics, food & beverage and luxury to achieve strategic and operational digital transformation goals.

Since the launch of the first ‘Tagless Underwear’ in 2016, Bananain has used somatosensory technology to re-imagine lifestyle essentials such as underwear, socks, loungewear and light outdoor apparel. Bananain enjoys independent R&D capabilities, owns a host of patents on body-sensing technology worldwide and has achieved 100% growth for 5 consecutive years.

With faster-than-expected growth during the pandemic, Bananain needed technological support to embrace a multicategory business model.

“We need a system to incorporate and upgrade our existing processes in order to diversify our product offerings,” says Zoom Zang, Bananain’s IT consultant. “Having fewer original categories facilitates the continuity of the founder’s design concept. However, multi-category development makes it easy to

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deviate from our brand philosophy. A centralized management system is required to coordinate and match our development needs.”

To achieve this goal, Bananain selected Centric Fashion PLM on the basis of its configurability, built-in industry best practices and the expertise of the Centric team.

“One of the key factors for Bananain’s success is its industry-leading innovation awareness, which requires an R&D management system with flexibility and scalability. After watching the Centric PLM demonstration, the team was struck by the configurability of its system, which was able to quickly meet Bananain’s needs,” says Zoom Zang.

“Centric PLM will enable us to continuously deliver the DNA of the Bananain brand and integrate it into the design concept, as well as pass consumer feedback to the designers to create a R&D ‘closed loop’. Meanwhile, we expect suggestions from the Centric team on Bananain’s improvement and optimization, and to witness Bananain’s new product updates and iterations with the help of Centric PLM. This will no doubt help Bananain maintain its industry-leading technical advantages.”

“We are honored to partner with Bananain, an up-and-coming brand driven by technology and design,” says Chris Groves, President and CEO of Centric Software. “We look forward to helping Bananain achieve their category expansion goals and development ambitions through close cooperation between our teams.”

Britannia Collaborates with Accenture to Accelerate its Digital Transformation

29 September 2021

Accenture has helped Britannia Industries Ltd. (BIL), India’s largest bakery foods company with presence in over 80 countries, accelerate innovation, capture value and improve the customer and supplier experience, through a holistic digital transformation program.

As Britannia’s partner on its digital journey, Accenture designed, developed and deployed a technology system based on SAP S/4HANA®. The new system has increased the visibility and accessibility of data across the organization and enabled deeper use of automation and analytics to guide business decisions.

The enterprise-wide program is focused on modernizing Britannia’s business model by digitizing essential services and processes, allowing the company to better respond to changing market trends. For Britannia’s large network of suppliers, this project will help streamline procurement and supply chain management, using SAP Ariba® solutions to expedite digital onboarding, contract management and procurement processes.

By digitizing more than 80 manufacturing units and 50 warehouses, Britannia can significantly reduce IT operational costs and unlock capital for innovation and growth initiatives. The system will improve inventory optimization, product availability and workforce productivity for Britannia by building more effective business processes across manufacturing, finance, sales and supply chain management.

“Despite the challenging business environment in the past year, we have witnessed a steady growth in our business performance. At Britannia, we are committed to expanding to new product categories in line with consumer expectations and our vision of entering one new market every year,” said N. Venkataraman, Executive Director & Chief Financial Officer, Britannia. “We believe the digital transformation of our business, supported by Accenture, will play a pivotal role in growing our business at speed and scale with data-backed insights and operational efficiencies.”

“Technology is a critical enabler for business leaders looking to spot and respond to evolving consumer and market demands,” said Manish Gupta, managing director and lead for Accenture’s Products practice

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in India. “By transforming Britannia’s core operations, we have helped build a digital backbone that will not only benefit their entire value chain of suppliers, retailers and partners, but also creates a solid foundation for innovation and new growth opportunities in today’s integrated marketplace.”

Accenture’s Consumer Goods & Services industry group helps businesses innovate and grow — from enabling front-office transformation to building intelligent enterprises underpinned by technology and analytics — to help them achieve consumer relevance.

Cement-Building Materials Business of SCG Selects DXC Technology for Move to Cloud to Modernize Mission-Critical IT and Integrate Digital Solutions

29 September 2021

DXC Technology announced the successful upgrade and migration to a cloud-based enterprise resource planning (ERP) solution for Cement-Building Materials Business of Siam Cement Group (SCG). Under terms of the agreement, DXC will build on the Google Cloud’s platform to support Cement-Building Materials Business of SCG on their SAP S/4HANA cloud transformation journey over the next five years.

SCG (Siam Cement Group) a leading business conglomerate in ASEAN, is the largest and oldest cement and building material company in Thailand and Southeast Asia. Cement-Building Materials Business, which is one of three core business units of SCG, is focused on cement and concrete product manufacturing and distribution. The company and DXC Technology have worked together for more than ten years on infrastructure/ outsourcing managed services, private cloud managed services and security including application implementation and support.

Operating its business on multiple instances of SAP ERP applications, Cement-Building Materials Business of SCG needed sharper enterprise-wide visibility across its business functions. With a focused approach defined by DXC, the shift from on-premises infrastructure to Google Cloud’s platform delivered:

- Faster deployment to the cloud with minimal disruption to the user community of Cement-Building Materials Business of SCG;
- The ability to scale its ERP systems up and down to meet changes in customer demands and data volumes; and
- Consolidate SAP instances, by migrating SAP workloads to Google Cloud (with Platform as a Service), accessible across the Cement-Building Materials Business of SCG network, spread across 33 companies in 14 countries.

“The construction industry in ASEAN is at an inflection point, with customer mindsets and priorities changing as we all adapt to the new-normal,” said Khun Tharinee Chucharoen, Digital Technology Manager - Regional Business, Cement-Building Materials Business of SCG. “Cement-Building Materials Business of SCG turned to digital technology and cloud to help us stay ahead of competition in the cement and building materials business. Along with a trusted partner in DXC Technology, well entrenched within our IT estate, helped us accelerate our digital transformation strategy with a cost-effective approach.”

Since implementation, the new cloud-based solution has put in place efficiencies that has enabled 1000 Cement-Building Materials Business employees to use the integrated solution across finance, sales, supply chain, sourcing and procurement, manufacturing, and production planning.

“By implementing a cloud-based solution in this way, Cement-Building Materials Business of SCG was

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able to maximize the value from their move to cloud. This engagement demonstrates the strength of DXC capabilities across the Enterprise Technology Stack and our ability to move applications to cloud the right way to realize value on customer investments,” said Apichart Arunkunrath, Managing Director DXC Thailand. “We are delighted to continue to work with Cement-Building Materials Business of SCG to help them navigate and succeed on their cloud transformation journey.”

Phase Two of the partnership will see on-boarding of SAP 4.7 entities onto a harmonized SAP S/4HANA platform to take advantage of new high-speed system and innovation, as part of the project roadmap.

“SAP and DXC have been strategic partners, working together over the years.” said Atul Tuli, Managing Director of SAP Indochina. “Move to cloud will help Cement-Building Materials Business of SCG leverage recognition of SAP S/4HANA, an intelligent ERP solution across cloud, working in harmony to unlock new levels of performance across an organization. It will also help Cement-Building Materials Business of SCG take advantage of new opportunities and manage dynamic market environments. We are glad to collaborate with DXC to help Cement-Building Materials Business of SCG foster stronger innovation within the company.” Atul added.

City of Toronto Selects Trimble Unity for Water Infrastructure Management

29 September 2021

Trimble announced that Toronto Water has selected the Trimble® Unity™ software platform to support its vision to improve operational efficiency across the entire organization. Trimble Unity can automate asset and infrastructure management workflows, improve data accuracy by eliminating redundancy and streamline processes between field and office teams to enhance Toronto Water's commitment to customer service and quality.

Toronto Water is responsible for drinking water treatment and supply, wastewater collection and treatment, and stormwater management for approximately 3.6 million City of Toronto residents and businesses. It also supplies water to neighboring regions across the Greater Toronto Area.

Annually, Toronto Water actively responds to over 44,000 service requests, 100,000 work orders and 300,000 inspections and preventative maintenance activities. Currently, Toronto Water utilizes a combination of software and applications to meet its daily planning, scheduling and work requirements.

Toronto Water has been seeking a platform solution to support hundreds of field and office workers as well as bridge other legacy technology that will improve staff workflow activities, improve outputs and enhance customer service. The City selected Trimble Unity, a cloud and mobile solution that leverages Esri® Geographic Information System (GIS) technology to provide a comprehensive utility mapping, work management and analytics platform.

"The Trimble team has been excellent in providing their knowledge, experience and expertise throughout the project. They have focused heavily on understanding our business and how to translate it into the configuration of our system while addressing many key business process issues that have been problematic for several years," said Helder Vieira, support supervisor of Toronto Water.

"The City undertook a competitive RFP last year to find a solution that met a comprehensive set of requirements while also being able to bridge the time gap between the implementation of the new

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Enterprise Work Management System (EWMS) and the retirement of the existing works management system," added Vieira. "Trimble met and exceeded requirements set out in the RFP. The Trimble Unity solution empowers users to configure and customize to meet their needs and overcome limitations of other software."

Dedalo crosses the finish line of the 1001VELAcup with ESTECO Technology on board

29 September 2021

The Audace Sailing Team from the University of Trieste won the 1001VELAcup Trophy: Matija Succi and Alberto Tezza on board of **Dedalo** succeeded the international regatta, where sailing boats were designed, built, and run by university students.

The 1001VELAcup Trophy, the international universities sailing challenge organized by the **1001VELAcup Association** in collaboration with the **University of Palermo** and the **Circolo della Vela Sicilia** with the contribution of the *Sicily Foundation*, ended on September 26 and was held in Mondello, Italy.

The Audace Sailing team boat is born from an extracurricular project of the Department of Engineering and Architecture of the University of Trieste.

The Audace Sailing team relied on **modeFRONTIER technology** for the design of the boat.

The main goal of the **Dedalo's hull design** was the pursuit of a perfect balance between stability and speed.

To evaluate those objectives a completely parametric model in **Grasshopper/Rhino** was created. The performance and dynamic stability of the hulls generated by Grasshopper were then evaluated using various regression formulas.

modeFRONTIER has enabled the team to explore the design space thoroughly, allowing the reduction of computing time through the automation of the analysis and the integration between multiple software.

DXC Technology IP Licensed by Microsoft for Microsoft Dynamics 365

30 September 2021

DXC Technology announced that Microsoft has licensed two application modules from DXC that extend the functionality of Microsoft Dynamics 365, ensuring every Dynamics 365 customer worldwide will have the ability to access the enhanced features for supply chain and rebates management.

Microsoft's decision was based on DXC Technology's strong enterprise applications capabilities and ability to re-imagine business process with high quality Intellectual Property (IP) solutions for Dynamics 365. This latest licensing follows the provision of DXC's enterprise credit management applications solutions which were licensed by Microsoft in August 2018.

As one of the largest independent Dynamics 365 systems integrators in the world, DXC has helped over 4,500 active customers complete successful digital transformation projects using the full suite of Microsoft technologies and applications.

"DXC is working closely with Microsoft's research and development team to ensure the functionality we develop adds value to Dynamics 365 business processes and reduces on custom code. Now every Dynamics 365 customer worldwide will have the ability to access this new functionality as part of the next release," said Stuart Dickinson, General Manager and Director, DXC practice for Microsoft in ANZ.

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The DXC modules licensed by Microsoft include a Landed Cost application which delivers financial and logistical control of imported freight from manufacturer to warehouse and a Rebates Management application which automates complex vendor and customer rebates. By formally integrating these application modules into Dynamics 365, Microsoft will add complex functionality to the solution and help customers improve business and operational efficiencies.

Pat Flynn-Cherenzia, Group Product Manager, Dynamics 365 Supply Chain, Microsoft said, “We greatly value partners like DXC. Working closely with their team on licencing, this new IP demonstrates the success of the Microsoft partner network in action. Together we’re meeting our customers’ needs and expanding the functionality and reach of the Dynamics solution across industry and deep into businesses across the world.

“It is important that we anticipate, understand and respond to customer demand to develop quality, robust IP that meets Microsoft’s high standards of functionality and design. We’re committed to this partnership with Microsoft and encouraged by its success.”

DXC is a 21-year member of Microsoft’s Inner Circle for Microsoft Business Applications and operates in North America, Asia Pacific, the U.K and Ireland, and Europe and the Middle East. It is a Microsoft partner in these regions with over 2,000 Dynamics 365 resources worldwide.

Fanuc and ModuleWorks Present As Real As It Gets Simulation at EMO 2021

29 September 2021

Fanuc and ModuleWorks have collaborated on a photo-realistic and fully interactive simulation of a CHIRON machining center which they will present at the Fanuc stand (Hall 7, E02) at EMO 2021 (4-9 October, 2021 in Milano). Running on the ModuleWorks Visual Twin and connected directly to the Fanuc controller, the simulation enables Fanuc to demonstrate its latest control features on a virtual machine instead of a real machine.

The Visual Twin combines the ModuleWorks digital twin with high-end computer animation. It runs directly off the Fanuc controller just like a real machine, using the same parameters and an exact replica of the motion data produced by the machine’s servos to create a highly accurate and visually realistic simulation of the entire machine kinematics. Operators and engineers use the Fanuc HMI to set up and run jobs on the Visual Twin as if they were real jobs on a real machine which creates an authentic operating experience. This makes the Visual Twin a flexible and cost-saving alternative to setting up and shipping machines to exhibitions and live events. As Dr. Martin Stockinger, Product Manager CNC, at Fanuc explains:

“With the Visual Twin we can demonstrate all the new features of our controller on a machine tool without having to ship the actual machine. The whole set up is about the size of a fridge-freezer and weighs only a fraction of a real machine, which reduces our exhibition footprint and saves us a lot of costs. This is a big advantage, especially in the current uncertain climate, because we can stay flexible and quickly adapt our plans. We can also easily transport it to on-site customer meetings or quickly set up and run photo-realistic online demos from our own offices.”

The ModuleWorks Visual Twin also offers more flexibility for machine tool builders who can set up and run Visual Twins for any number of different machine tools from the Fanuc CNC or CNC GUIDE.

“It’s great to see how Fanuc are using the Visual Twin to support their business strategies. We look forward to an ongoing partnership and working together to add more functionality and further capabilities to the software.”

-Mark Foti, Head of Digital Factory at ModuleWorks

FANUC and ModuleWorks at EMO 2021.

Visitors to EMO 2021 can see a live demo of the Visual Twin running off a Fanuc controller with a virtual CHIRON machining center at the Fanuc stand (Hall 7, E02).

LTI and eClinicalHealth Form Strategic Partnership to Accelerate Innovation in Clinical Research

28 September 2021

Larsen & Toubro Infotech, a global technology consulting and digital solutions company has entered in a strategic partnership with eClinicalHealth Limited to accelerate digital innovation in R&D Clinical Trials Management process for patient centric drug development. The partnership will help clients decentralize clinical trials setting new benchmarks of excellence in clinical research space.

The significance of the tie-up is based on the fact that 86 percent of clinical studies are delayed due to challenges in patient engagement – mainly involving recruitment and retaining patients, which is a time consuming and expensive process. The pandemic has further aggravated this challenge. It is in this context that eClinicalHealth, which is focused on developing innovative clinical trial solutions, launched cloud-based patient-centric SaaS solution, Clinpal – which improves patient engagement for each clinical trial journey.

As part of this strategic partnership, LTI with its digital, technical and life sciences domain capabilities, will help accelerate joint go-to-market pursuits and faster deployment for Clinpal Adopters. The solution will make use of exponential technologies such as analytics and AI to enhance patient engagement and faster clinical studies.

Archana Ramanakumar, EVP & Global Delivery Head – Life Sciences, Media, Consumer & Technology, LTI commented: “At LTI, we are on a journey to drive digital transformation for various aspects of clinical trials. Our endeavour with eClinicalHealth partnership is to accelerate and streamline the enablement of Decentralized Trials, to reduce patient burden and drive acceleration of clinical trials. With this partnership we aim to accelerate the development and deployment of eClinicalHealth’s ClinPal platform in clinical trials for the industry.”

Karl Landert, Chairman of the Board and CEO at eClinicalHealth said: “The new normal world has put into limelight the benefits of a telemedicine ecosystem for larger benefit of end-users. Clinical trials assume an important function in development and improvement of treatment methods in order to enhance patient’s wellbeing, and De-Centralized Trials (DCT) have attained highest order of patient preference. With our strategic partnership with LTI, our aim is to further scale and simplify patient engagement.”

Meyer Werft Engineers and Now Builds Its First Luxury Passenger Ship Designed with Dassault Systèmes’ 3DEXPERIENCE Platform

1 October 2021

Dassault Systèmes announced that the construction phase of Meyer Werft’s first luxury passenger ship designed with the 3DEXPERIENCE platform as well as the engineering phase of its sister ship are underway. **Meyer Werft**, one of the world’s leading cruise ship builders and a long-term Dassault Systèmes customer, extended and expanded its use of the 3DEXPERIENCE platform to increase design efficiency and shorten construction time on this and future customer projects.

The luxury ship, with an expected delivery in 2022, will have a volume of 144,000 gross register

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tonnage, a capacity for 1,250 passenger cabins, and run on environmentally friendly liquefied natural gas. The efficient design and delivery of such state-of-the-art ships is crucial in a competitive marketplace.

Meyer Werft set an objective to efficiently design and deliver in time the most innovative cruise ships. To achieve this, the company expanded its engineering, product lifecycle management, automated production deliverables, and manufacturing user capabilities with the “Designed for Sea” and “Optimized Production for Sea” industry solution experiences based on the 3DEXPERIENCE platform.

In addition, the 3DEXPERIENCE platform’s openness allows Meyer Werft to integrate project data generated by legacy digital design tools at its sites and its suppliers. This supports a smooth and gradual transition to a unified and integrated business experience platform.

“Extending our use of the 3DEXPERIENCE platform is part of our ambition to more efficiently design and build innovative cruise ships,” said Dr. Paul Meyer, CIO, Meyer Werft. “We aim to unify tools and processes across our sites. As we are in the construction phase for our first ship designed with the 3DEXPERIENCE platform, our partnership with Dassault Systèmes continues to strengthen to achieve this.”

“The 3DEXPERIENCE platform is the only platform that enables industry leaders like Meyer Werft to transform their industrial business and deliver new customer experiences,” said François-Xavier Dumez, Vice President, Marine & Offshore Industry, Dassault Systèmes. “The platform has already been at the core of many innovative designs, as shipbuilders can avoid manufacturing errors, rework or delays downstream. Together with Meyer Werft we are creating the next generation of shipbuilding solutions to deliver long-term value.”

NORD/LB Selects TCS as Strategic Partner for its IT Transformation

28 September 2021

Tata Consultancy Services (TCS), a leading global IT services, consulting and business solutions organization, has been selected by NORD/LB, a leading German commercial bank, as its strategic partner for its IT transformation.

NORD/LB has embarked on a transformation journey that targets a new business model by 2024, and a leaner, more agile operating model. It has partnered with TCS in this journey for the latter’s extensive knowledge of Germany’s banking and financial services as well as its proven track record of executing large transformation programs.

As part of the five-year partnership, TCS will work with the bank to simplify and transform its application estate across multiple businesses – financial markets, wholesale and retail banking, through application consolidation and automation. TCS will help NORD/LB adopt newer technologies to automate manual processes in the application management environment and enhance operational resilience. Leveraging its deep knowledge of local banking norms, TCS will also build new features and functionality to support NORD/LB’s transformation goals.

*“NORD/LB is transforming its business to adapt to the latest trends and we decided it was time for us to look at the next step of technology transformation,” said **Tobias Meiler, CIO, NORD/LB.** “After a thorough process, we selected TCS as the partner for this journey as they demonstrated deep market and financial domain expertise, global delivery capability augmented with strong German delivery, customer focus and strong transformation capabilities.”*

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“TCS is a strategic partner for multiple leading financial institutions across the region, and has been driving IT landscape transformation, business innovation and growth. TCS is delighted to partner with NORD/LB, one of Germany’s largest commercial banks. We will leverage our deep domain knowledge and technology expertise to transform their IT landscape and help accelerate their growth and transformation journey,” said **Uma Rijhwani, Business Unit Head, Financial Services – Central Europe, TCS.**

Present in Germany since 1991, TCS currently partners with over 100 leading German corporations in their growth and transformation journeys, including 20 of the DAX40. TCS was ranked first in customer satisfaction by leading Germany companies in a survey by Whitelane Research. In January 2021, TCS acquired Postbank Systems AG, a full-range captive IT service provider, adding around 1,500 employees with deep banking expertise, to support its growth in Germany.

PROLIM secures multi-year contract with GHD to enable Design Innovation

29 September 2021

PROLIM wins contract with GHD to deploy Simcenter STAR-CCM+ at GHD for digital transformation with Siemens Digital Industries Software. Simcenter STAR-CCM+ is a leading CFD platform for both realistic multiphysics simulation, capturing the complete geometry of the product, and all of the physics that are likely to influence its real-world performance through automation and design exploration.

Established in 1928, GHD is a leading professional services company operating in the global markets of water, energy and resources, environment, property and buildings, and transportation. “GHD is dedicated to providing technical innovation and services to the communities we serve. Simcenter STAR-CCM+ brings automated design exploration and optimization to the CFD simulation toolkit. This allows our designers, working on projects such as hydraulic structures, industrial water, HVAC, and dispersion modeling, to efficiently explore the entire design space to make better design decisions faster.” said Nick Deeks, Technical Director.

Simcenter STAR-CCM+ is more than just an industry-leading Computational Fluid Dynamics (CFD) program. It’s an all-in-one solution that delivers accurate and efficient multidisciplinary technologies in a single integrated user interface. As a simulation tool that spans a variety of engineering disciplines, it can shorten the design cycle and help discover improved designs by predicting a product’s real-world performance. “STAR-CCM+ brings automated design exploration and optimization with Design Manager, enabling users to set up and automatically evaluate families of designs directly within STAR-CCM+,” says John Belsham, Sales Director of PROLIM.

“Using robust and repeatable workflows, STAR-CCM+ creates simulation models that can easily be reused and updated to various design configurations and operating scenarios with minimal manual effort,” said Samantha Murray, Vice President and Managing Director – Australia and New Zealand at Siemens Digital Industries Software. “I’m excited to see how the combination of GHD’s industry expertise and Siemens’ strength in product lifecycle management will support the creation of new designs that drive the innovations of tomorrow.”

PTC and Volvo Group Announce Digital Engineering Collaboration

27 September 2021

PTC and the Volvo Group announced plans to further increase collaboration around digital engineering. Volvo Group has decided to unify its CAD platforms, which positions PTC's products to serve as the primary CAD and PLM solutions used in the Volvo Group for complete vehicle design.

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This world-class solution, which will leverage the full capabilities of PTC's Windchill® product lifecycle management (PLM) software and Creo® computer-aided design (CAD) software, is designed to promote collaboration across Volvo Group's PLM and CAD functions and significantly increase the reuse of digital product data across the Volvo Group.

Volvo Group, which offers trucks, buses, construction equipment, and power solutions for marine and industrial applications, embarked on a strategy to transform its IT architecture by consolidating PLM and CAD platforms to enable better leverage of product data across the value chain.

"Using one PLM and CAD platform will act as a key enabler in our digital engineering transformation," said Lars Stenqvist, CTO at Volvo Group. "Leveraging this foundation, we see great possibilities in connecting PTC's IOT and AR solutions into our digital thread strategy."

In addition to transforming its product innovation process, Volvo Group seeks to shape the transportation industry's future with technology and systems solutions that are safer, cleaner, and more efficient.

"By aligning with PTC around the CAD platform, we will work together to create a world-class capability that we expect will be a competitive advantage for years to come as we pursue the future landscape of sustainable transport and infrastructure at Volvo," said Stenqvist.

"By working together on a common vision, we have driven important improvements to the PTC product suite, and important improvements in enabling Volvo Group to bring great products to market," said Jim Heppelmann, President & CEO, PTC. "We are pleased to be a partner of choice for Volvo Group across its product development teams. The digital engineering approach that we will achieve together will serve as an example to companies around the globe."

TATA TECHNOLOGIES COLLABORATES WITH THE GOVERNMENT OF MANIPUR TO TRANSFORM TECHNICAL TRAINING AND ENCOURAGE ENTREPRENEURSHIP

29 September 2021

Tata Technologies Ltd., a global engineering and product development digital services company, & the Government of Manipur have entered into a Memorandum of Agreement (MoA) for a period of 3 years to transform technical training and encourage entrepreneurship and innovation in Manipur. The CIIT will be a one-stop center providing Integrated technical training and skill development in collaboration with the Department of IT, Government of Manipur, to communities close to where they live in Manipur as part of the government's strategy to better the lives of its people as well as empower youth to undertake entrepreneurship and become aatmanirbhar.

Manipur has always been at the forefront of sports & culture. The Government of Manipur is now committed to bringing it to the forefront of technology and provide its people a learning ecosystem that empowers youth to be job-ready and become entrepreneurs. The collaboration between the Government of Manipur and Tata Technologies is aimed at building a futuristic training ecosystem to implement the best-of-its-kind training infrastructure, curriculum and enable people of Manipur to be at the forefront of the technology revolution that's happening in the new normal. The total investment under this project is pegged at approx. Rs. 200 crores and the center will be up and running by Q1 FY 23 with the capacity to train 1500 students every year. This new CIIT is expected to bring qualitative improvements in the field of engineering education and will cater to industry requirements of making available job-ready engineers. Additionally, this project will improve the availability of advanced skills required across the manufacturing value chain in Manipur thereby incentivizing businesses to invest in Manipur and create

jobs.

Tata Technologies will collaborate with 20+ global industry partners to implement this project by developing this state-of-the-art centre and industry-leading course curriculum leveraging its manufacturing domain knowledge. The company will deploy training personnel along with industry partners for 3 years and will facilitate the deployment of advanced tools and equipment as well as software support. The CIIT will facilitate upskilling in areas related to Advanced Engineering Research & Development (ER&D), Digital Engineering, IoT, AI, ADAS, Telematics, Digital Thread, Customer Experience, and advanced technologies in the Automotive, Aerospace, IHM, and Industrial sector.

Speaking on the occasion, **Honourable Chief Minister N Biren Singh** said *“Manipur is transforming, and we want Manipur to be at the forefront of the technology revolution that is taking place. Through our collaboration with Tata Technologies, we aim to create the best of its kind CIIT that will empower the youth of Manipur and create better employment and entrepreneurship opportunities for them. This will also lead to the availability of job-ready engineers which in turn will transform the State of Manipur into a potential investment destination for those industry players who are keen on embracing Industry 4.0 and smart technologies for manufacturing.”*

Speaking on the occasion, **Mr. Warren Harris, Managing Director and CEO of Tata Technologies**, said, *“Our vision of Engineering a better world embodies our commitment to skill-building and developing future-ready talent that would be required by the Industry to develop and manufacture innovative products and solutions. Through this collaboration with the Government of Manipur, we intend to leverage our product engineering expertise and manufacturing domain knowledge to train and skill future-ready engineers who are capable of innovating the product of the future and be part of the rapidly transforming ecosystem.”*

Speaking on the occasion, **Chief Secretary Dr. Rajesh Kumar** said *“CIIT will be a one-stop centre to provide integrated technical training and skill development for the youth of Manipur. The upskilling program will focus on the manufacturing value chain, Digital Engineering, Electric Vehicle technologies, robotics, etc and the centre would be equipped with high-end machines, infrastructure, courseware, and skilled trainers. The students can expect multiple certifications from technology/OEM providers in addition to the certification provided by the institutes across all trades.”*

Speaking on the occasion, **Mr. Anand Bhade, President & Global Head – Technology Solutions, Tata Technologies**, said, *“India is leading the technology revolution that is driving the future of manufacturing and Industry 4.0. Our experience of working with global OEMs on new technologies & solutions, and our understanding of the manufacturing value chain allows us to develop an industry-relevant curriculum that will equip students with skills that are being sought by manufacturing companies. This collaboration with the Government of Manipur is a great opportunity for us to help train the youth on advanced manufacturing technologies and solutions which will not only provide them better employment opportunities but also address the industry challenges around availability of trained job ready resources.”*

TCS Helps Cardiff Council Launch Mobile App for Jobseekers to Access Employment, Training and Funding Services

24 September 2021

Tata Consultancy Services (TCS), a leading global IT services, consulting and business solutions organisation, has designed and developed a new mobile app for Cardiff Council’s Into Work Service to support jobseekers and those looking to change careers by providing easy access to real-time

information on local employability services.

The Cardiff Council partnered with TCS to drive its digital strategy aimed at assisting members of the local community improve their career prospects, gain new professional skills or secure a new role. As part of this strategy, TCS built the new 'Into Work Cardiff' app using its DigiGOV™ framework that makes digital services faster to configure, easier to use and more accessible.

The app provides current information on the wide range of employment support services delivered by the Council's Into Work advice services, including job clubs, one-to-one mentoring projects, adult learning courses, training, employment events, access to funding and more – all at the user's fingertips on their smartphone or tablet.

On downloading the app, users will be able to immediately register for Into Work support, making it quicker and easier for anyone to advance their learning and development and find a job which closely matches their unique skills and experience.

“Our Into Work Advice Services have a great track record of supporting people into employment across a wide range of different sectors, helping to equip them with what they need to get back into work, supporting others to progress in their careers and get a job they really want, or into training and education,” said **Cllr Chris Weaver, Cabinet Member for Finance, Modernisation & Performance**. *“With the new app, built by TCS, it's going to be even easier for people to find the latest updates to provision, whether that be information on job clubs, new courses they may be interested in, or projects that can get them on the path to where they want to be.”*

Joe Cicero, Assistant Manager, Skills Hub & Employer Liaison, Into Work, said: *“Working with the TCS team has been a positive experience. They have liaised with us extensively throughout the development process, taking account of our ideas and using their expertise to realise a quality product which fulfils our stated ambitions. The team is highly knowledgeable and friendly and take care to explain technical aspects and encourage discussion and suggestions from non-technical staff. We have very much enjoyed working with TCS.”*

“Innovative use of digital technologies can transform citizen services significantly, expand access and enhance citizen experience,” said **Shalini Mathur, Business Unit Head, Public Services for UK, Europe & ANZ, TCS**. *“We are proud to be part of this important community initiative and look forward to continue working with Cardiff Council to develop such innovative, inclusive and effective digital solutions that enable delivery of state-of-the-art citizen services.”*

TCS Partners with MCX to Transform the Exchange's Core Systems and Support Future Growth

30 September 2021

Tata Consultancy Services (TCS), a leading global IT services, consulting and business solutions organization, has been selected by The Multi Commodity Exchange India Ltd (MCX), India's largest commodity exchange, as the technology solution provider for its growth and transformation journey. As part of Project Udaan, TCS will help MCX build a new technology core, transforming its trading as well as post-trade functions, to support its future growth and further strengthen its leadership position in the commodity derivatives market in India.

TCS will design and deploy a cutting-edge, ultra-low latency, high availability, high resilience and high-performance solution that integrates multiple systems to transform MCX's operations end to end. To enable high throughput trading, the solution uses the Deutsche Börse T7® trading platform from the Deutsche Börse Group. TCS is a strategic business and IT transformation partner to the Deutsche Börse

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Group, and has helped develop this platform, and is also implementing it in select engagements.

Post-trade activities such as clearing, risk management, delivery and settlement will be transformed using **TCS BaNCS for Market Infrastructure™** with its unique High Performance Transaction Manager (HpTM) deployed as microservices. Its unified clearing approach along with integrated real-time risk management and position monitoring, as well as its collateral and delivery management and settlement capabilities, will help MCX in meeting its current and future business needs.

Further, TCS BaNCS' APIs and support for global messaging standards will enable easy integration with various participants, sub-systems and ecosystems. Compliant with global regulatory standards, TCS BaNCS will help MCX meet current and future regulatory standards including emerging regulations around client level collateralization.

Additionally, TCS will implement **TCS BaNCS for Securities Trading™** for MCX's trading members, providing them a modern, fast, intuitive user interface and real time market data feed for trading and post trade activities.

“Increasing trading volumes, longer trading hours, new asset classes, and higher retail participation are driving forward thinking exchanges and market infrastructure institutions to accelerate their transformation. A large growing economy like India has immense future potential in Commodity markets. We are delighted to partner with MCX in building a future-proof platform to enable this growth. Our strong presence across the Indian markets, unique market know-how, intellectual property, and ability to put together a world class solution will help us play a pivotal role in helping MCX drive its transformation,” **said R Vivekanand, Co-Head, TCS Financial Solutions.**

TCS BaNCS for Market Infrastructure is a world leading solution for CSDs, central counterparty clearing houses, exchanges and central banks, adopted by market infrastructure institutions in over 25 countries for their mission-critical business needs. Its components support trade and post-trade functions, including matching, settlement, risk and collateral management, surveillance, unified clearing, issuance, depository, and registry functions around a common reference data layer. With its unique ability to support multiple markets, currencies, and asset classes on the same platform, and its support for a wide range of messaging standards that enable real-time interfaces with market participants and external ecosystems, it has been a key catalyst in driving transformation in many markets worldwide.

TCS to Help Apoteket Drive its Digital Transformation across Sales Channels and Internal Processes

29 September 2021

Tata Consultancy Services (TCS), a leading global IT services, consulting and business solutions organization, has been selected as a strategic partner by Apoteket, Sweden's largest pharmaceutical retailer, to accelerate its digital transformation and growth.

Apoteket stores draw 34 million customers annually, making it the leading pharmaceuticals retailer in Sweden. The brand is looking to strengthen its leadership position in the region by transforming into a full-service healthcare provider, offering services across the value chain online and in-store.

TCS has been working with Apoteket since 2014. As part of the expanded strategic partnership, TCS will provide end-to-end IT services and consulting across the organization, encompassing the application and infrastructure layers. Further, it will help drive innovation by leveraging the TCS Pace Port™ in Amsterdam, a co-innovation and research hub specifically designed to help customers navigate their unique digital transformation journeys.

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TCS will also help the retailer leverage automation, robotics and artificial intelligence to create the next-generation customer experience across physical stores and online channels as well as streamline internal processes.

“Apoteket and TCS have been working successfully together since 2014 when it comes to operations services. Apoteket is in the middle of a digital transformation driven by changing customer behavior where we need a strong partner also when it comes to development and maintenance services as well as helping us with innovation and scaling up usage of digital technologies such as AI and IoT in order to create next generation customer experiences. TCS has proved itself to be a trusted regional IT partner with the Retail experience and innovation capabilities needed as well as strong customer satisfaction from the retail sector,” said **Clas Artvin, CIO, Apoteket**.

“Improving the synergy between physical stores and online channels is key to creating an intuitive, automated and unified customer experience across all touchpoints,” said **Abhijit Niyogi, Business Unit Head – Retail, TCS Europe**. *“We are excited to extend our strategic partnership with Apoteket and look forward to working closely together on the new digital strategy to secure its position as the leading pharmacy and healthcare provider in Sweden.”*

For over 10 years, TCS has been providing technology services to many of Sweden’s leading retailers, from grocery to apparel and specialty. TCS has played an important role in driving their digital transformation and helping them achieve their growth ambitions. TCS has been ranked #1 in customer satisfaction in a CxO survey of 85 retailers in Europe, by Whitelane Research.

Técnicas Reunidas Chooses Hexagon BricsCAD for Design Productivity at Less Cost

24 September 2021

Hexagon’s PPM division announced that Técnicas Reunidas, a world leader in the design and management of the execution of industrial plant projects, chooses BricsCAD® as its preferred computer-aided design tool for engineering and construction projects.

BricsCAD, built by Bricsys®, a part of technology giant Hexagon, offers design, engineering and construction firms the ability to maintain .dwg file compatibility without investing in third-party add-ons, which decreases the overall cost of CAD software ownership.

“A change in licensing policy by our former CAD provider drove us to find an alternative tool,” said Raúl Martín García, Head of the Engineering Systems Department at Técnicas Reunidas. “BricsCAD provides the same functionality we are used to in other .dwg-based CAD platforms together with a flexible licensing model, making it an attractive and cost-effective solution with a much lower total cost of ownership.”

“Many of the CAD engineers have already changed to BricsCAD with no impact to their productivity. There is an ease to BricsCAD that makes it a sensible fit for a company as large and geographically diverse as Técnicas Reunidas. Network licensing, seamless implementation, technical support in all time zones, and integration with other Hexagon solutions are hugely advantageous,” Martín concludes.

This deal with Técnicas Reunidas to use BricsCAD for complex industrial facility designs makes the company the largest BricsCAD user in Spain. BricsCAD will be used in all of the Técnicas Reunidas’ upcoming ventures, including a €900 million petrochemical complex expansion project in Poland.

“We are delighted to welcome Técnicas Reunidas, one of our largest Intergraph Smart® 3D customers, to the Bricsys-Hexagon family,” said Jean-François Stephan, Executive Vice President, Hexagon’s PPM division. “Opportunities like this confirm our commitment at Hexagon to prioritize the needs of the

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customer from product development through to licensing by offering solutions that facilitate an efficient and affordable design process.”

The Cornell Peter and Stephanie Nolan School of Hotel Administration Partners with Infor

27 September 2021

Infor, the industry cloud company, announced that the Cornell Peter and Stephanie Nolan School of Hotel Administration, a AAA Four Diamond Award-winning property tucked into Cornell University's vibrant campus and overlooking downtown Ithaca and Cayuga Lake, New York, has decided to implement key Infor Hospitality applications to meet and exceed modern guest expectations. These applications include Infor HMS, Infor EzRMS, and Infor Sales & Catering.

Infor HMS is a hotel property management system (PMS) built in the cloud that provides hospitality organizations with a reliable hub for operations, tools to create clarity around business data, and the ability to establish a solid foundation to consistently deliver a superior guest experience. Infor EzRMS is a cloud-based hotel revenue management software solution that automatically calculates demand and revenue forecasts, while recommending appropriate selling strategies. Deep-learning algorithms dynamically recognize patterns to ensure optimal and accurate business forecasts, pricing, and selling strategies to maximize yield and profit. Lasty, Infor Sales & Catering automates the entire event booking process—from initial inquiry to the final invoice.

“The hospitality industry is continuing to adopt modern technology solutions to optimize operations, deliver a superior guest experience, and meet the challenges of a constantly evolving hospitality space,” said Jason Floyd, general manager, Infor Hospitality. “Thousands of global hotel and resort brands leverage Infor’s powerful hospitality cloud solutions to strengthen communication throughout different teams and departments to optimize guest experiences for the future.”

Product News

Building a foundation for our digital future: Say hello to Xcelerator as a Service

27 September 2021

It is an exciting day for Siemens as we lay the foundation for the future of our software portfolio and for our community with the launch of Xcelerator as a Service (XaaS).

When we introduced Xcelerator – an integrated portfolio of engineering software, services and an application development platform that brings together the industry’s broadest and deepest technologies available to make our industrial customers’ digital transformation goals a reality – we blurred the boundaries between engineering domains to help our customers speed digital transformation.

Xcelerator enables innovative product design and manufacturing via robust digital threads that ensures data is accessible when and where it is needed. Through a comprehensive digital twin, organizations optimize their products and processes throughout the lifecycle. While many companies claim to offer a digital twin, only Siemens has the toolset, domain knowledge and usage expertise to deliver the comprehensive digital twin with the fidelity and breadth that manufacturers need to thrive in a world of complexity and deliver the innovation that customers and the market demand.

Leading industry analysts, CIMdata, believes, "The Xcelerator portfolio provides the breadth and depth that manufacturing enterprises need to create a comprehensive, actionable digital twin and manage the

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complete product lifecycle from creation through production and service across a heterogeneous value chain."

The future of industry is in the cloud

In June, at Siemens Capital Market Day, our president and CEO, Tony Hemmelgarn joined the Siemens Managing Board and leadership team to announce our intention to transition the Siemens Digital Industries Software business to SaaS (Software as a Service). We are transitioning to this new business model to fundamentally rethink the way our technology generates value for our customers and how we use the cloud to make our solutions more accessible, more flexible, and more scalable than ever. We have spent considerable time talking with our community and have worked on our own technologies and developed our strategy to build something truly transformational – for Siemens and for our customers. We're not simply adding a new user interface on top of existing tools, basic file sharing capabilities or moving limited desktop CAD functionality into the cloud. Instead, we've been focused on leveraging the cloud to deliver our industry-leading technology in new ways and to reduce the challenges of access, flexibility and scalability facing our customers today.

Say hello to Xcelerator as a Service

We are expanding the Xcelerator portfolio with the introduction of Xcelerator as a Service (XaaS). Many of our recent in-house developments and acquisitions, including MindSphere, Mendix and Supplyframe, have laid the cloud-native foundation for our move to SaaS – and Xcelerator as a Service is how we are going to continue to deliver on that strategy.

Xcelerator as a Service will make the Xcelerator portfolio more **accessible**, enabling manufacturing organizations and their extended value-chains to have a single source of truth and the ability to tap into high-performance computing, at any time, from anywhere and on any device. Cloud-based services will remove the need for HPC hardware or in-house IT expertise and allow anyone to carry out compute-intensive tasks via a web browser – whether that's advanced multi-physics simulation available to all or AI-driven generative engineering.

XaaS will offer need-based access to tools, features and compute resources organizations require, as they want them – via **flexible** and **personalized** solutions that offer instant productivity. Helping our customers achieve their goals with composable and configurable solutions while empowering individual users to shape their own workspace for maximum productivity is a core tenet of XaaS.

Manufacturing companies increasingly need to change the size of a team or manufacturing line, and with the increased **scalability** offered by XaaS, organizations can quickly adapt to market conditions and add capacity and capability when and where needed. This will allow both ad-hoc and established groups of stakeholders to together build and test products and processes with the most comprehensive digital twin - before investing in materials or equipment.

As we build capabilities and expand the offering, Xcelerator as a service will make new things possible for many types of companies. For example, a **multinational automotive OEM** will be able to use XaaS to increase collaboration across its globally distributed supply chain, through secure collaboration between internal and multi-tiered supplier led teams around the world. It can connect experts across engineering, simulation, manufacturing and production, with Mendix low-code capabilities to allow tailoring of the solution to meet specific needs.

Need to onboard a new supplier because they've got break through innovation? Share the data you need to, in a controlled and secure manner simply by typing in their e-mail address and letting the App handle the rest. Need that simulation workflow for your suspension sub-system wrapped up into a reusable, distributable and controllable application? We'll provide the low-code tools for the FEA

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expert to do it without needing a programmer. Need to collaborate with your suppliers across the other side of the planet, in virtual reality, with data from other CAD systems? Strap on that headset and let's get to work.

Or, consider an **automotive startup** that needs to make the jump from concept to deliverable market introduction. Xcelerator as a Service will enable this team to use a high-end product development toolset across mechanical design, electronics, software development and more but without requiring the IT infrastructure to support it, yet with access to the same toolset used by the world's leading manufacturing organizations to build comprehensive digital twins, at a fraction of the cost, from anywhere, any time and on whatever device needed.

Working alongside a supplier in Shenzhen and need to tweak a CAD file, recut your molds to get those first parts off the tool? Fire up your browser, log into XaaS, collaborate with your peers and make those edits in a managed environment. Got your prototype units in the field and wondering what to do with the stream of data from built-in sensors? Take advantage of the most comprehensive digital twin toolset, grab that data and drive your simulation with real-world results and deliver further innovation, faster than the competition. What about mixing in a little artificial intelligence to help push that next generation further, explore hundreds of purely virtual tests based on real world data in the cloud? We call that generative engineering, and it could change how we design products.

While Xcelerator as a Service is new, Software as a Service is not new to Siemens. In addition to the foundational elements, Teamcenter X is a cloud-native solution now a core part of XaaS – it offers the world's most widely used backbone PLM software, as a service, delivering instant-on cloud PLM for fast return on investment and the ability to scale as the organization grows.

Unique to XaaS is that it offers not only access to the Xcelerator portfolio, but to a broader community – with new opportunities to collaborate across the team, organization, and supply-chain. It will include learning environments and to a rapidly expanding marketplace for applications, software components and industry expertise.

Siemens Digital Industries Software is where today meets tomorrow, and with Siemens as trusted partner and adviser we hope, through XaaS, to enable our community to expand the boundaries of what they're capable of, envision and build their own future.

Brenda Discher

SVP, Strategy & Marketing, Siemens Digital Industries Software

CHIRON Group and ModuleWorks Revamp Collision Avoidance

29 September 2021

Intelligent software algorithms are essential for real-time collision avoidance, but they are only half the story. The other half is a well-designed user interface that enables operators to drive the software effectively. In their latest cooperation ModuleWorks, technology providers for digital manufacturing solutions, and the CHIRON Group, CNC machine tool manufacturers, put operator experience at the center of a new GUI for the ModuleWorks Collision Avoidance System (CAS).

The ModuleWorks CAS uses real-time machining data and look-ahead technology to detect imminent collisions and stop the machining process before an actual collision occurs. The CHIRON Group uses CAS as part of their ProtectLine digital system to protect their high-end machining centers from potentially expensive damage and downtime.

In addition to sophisticated algorithms, effective collision avoidance requires careful setup by the

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operator to ensure the system accurately represents the entire machining process, including the fixtures, workpiece and tools. The user interface therefore plays a pivotal role in the acceptance and effectiveness of the system:

“We asked ourselves: ‘What do operators need from a GUI in order to use the CAS effectively? The obvious answer was to ask the operators, so we created a project team with the CHIRON Group and their machine operators. This proved a great approach. In less than 12 months we were able to launch a new GUI that raises usability and operator acceptance.”

Jasper Sanders, Product Manager at ModuleWorks

“Collision avoidance is indispensable for safe and cost-effective manufacturing. Through the cooperation we have a system that truly supports machine operators and encourages them to use the full benefits of the collision avoidance technology on our machining centers”

Pascal Schröder, Development Coordination Digitalization at the CHIRON Group.

ModuleWorks and the CHIRON Group at EMO 2021

The results of the cooperation between the machine tool builder, technology supplier and machine operators will be exhibited for the first time at EMO 2021 in Milan (4-9 October, 2021).

The ProtectLine digital system is on show at the CHIRON Group booth (Pavilion 4, Booth B05).

ModuleWorks is also demonstrating its Collision Avoidance System at the ModuleWorks booth (Pavilion 7, Booth H15).

Design Collaboration Update, Autodesk Construction Cloud – September 28, 2021

28 September 2021

Marco Ramolla contributed an Autodesk blog post on September 28 that details the newly released updates to Autodesk Construction Cloud and Autodesk BIM 360. To learn more about the updates to the workflows and features go to the Autodesk Blog <https://blogs.autodesk.com/bim360-release-notes/2021/09/28/design-collaboration-update-autodesk-construction-cloud-september-28-2021/>.

HCL Technologies Announces Availability of DRYiCE™ iAutomate on Google Cloud Marketplace

30 September 2021

HCL Technologies (HCL), a leading global technology company, announced the availability of DRYiCE™ iAutomate (iAutomate), an AI-powered runbook automation product, on Google Cloud Marketplace. This enables customers to easily access iAutomate to simplify and automate the enterprise IT operations lifecycle

The iAutomate partnership with support for Google Cloud will help customers with self-service driven identification of automation use-cases and automation of redundant tasks so that employees can focus on high-value activities. It will also ensure compliance by avoiding critical outages and reducing operational risks. The product also offers more than 1,500 reusable and configurable runbooks available out-of-the-box.

“One of the key pivots of HCL’s ecosystem strategy is our Independent Software Vendor (ISV) approach aimed at delivering superior customer experiences by enabling product collaboration”, said Kalyan Kumar, Chief Technology Officer and Head, Ecosystems, HCL Technologies. “The launch of iAutomate on Google Cloud Marketplace is yet another innovative and differentiated collaboration that

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bolsters our #HCLCloudSmart offerings, which are built around intelligent automation, analytics and data value unlocking.”

iAutomate enables translation of operational knowledge into automated processes using natural language processing algorithms and knowledge analysis in tandem with an orchestration engine. The product constantly learns by reading through different variables available in the IT service management system and updates itself to solve a particular incident. It enables robust end-to-end incident remediation and task automation in a complex IT infrastructure landscape.

“We are excited that DRYiCE products are now available on the Google Cloud Marketplace beginning with iAutomate” said Amit Gupta, Executive Vice President and Global Head, DRYiCE Software, HCL Technologies. “This partnership will enable customers to leverage a superior customer experience in transforming and simplifying IT and business operations by leveraging AI and cloud.”

“We’re delighted that HCL continues to grow its portfolio of software products available on Google Cloud,” said Pallab Deb, Director, Partner Solutions, Google Cloud. “Bringing DRYiCE software to Google Cloud Marketplace will make it very easy for customers to deploy AI and automation capabilities on Google Cloud’s scalable and sustainable infrastructure, ultimately helping enterprises reduce complexity in their IT environments.”

Infor Continues to Invest in Cloud-Based Event Management for Hospitality Industry

27 September 2021

Infor, the industry cloud company, announced a significant update to Infor Sales & Catering with two new guest self-service portals (SSPs) for online booking and ordering. Part of the Infor CloudSuite Hospitality suite of solutions, Infor Sales & Catering is one of the industry’s only platforms designed around the beginning-to-end stages of an event. This unique, process-driven lifecycle technology is customizable and designed to streamline processes for added productivity, building consistent business practices to improve data integrity, and eliminating errors to help reduce costs.

One of the new portals, Infor SCS Online Booking SSP, allows guests to check availability for new events in real time. If event space is available on a desired date, guests can reserve that location, make selections for food, beverage and other services, receive a summary of charges and pay with a credit card — all online without having to engage with a salesperson. The benefits to guests and meeting planners are convenience, flexibility and enhanced productivity. This eliminates the need to wait for a reply to an inquiry or work within the venue’s business hours. The benefit to the venue is increased revenue and reduced costs. Open event spaces have a higher chance of being booked and do not require the engagement of a salesperson, which is especially important during times when workforces might be in flux.

The second portal, Infor SCS Online Ordering SSP, delivers tools for guests to go online to order catering services for delivery. Whether ordering food and beverage services for a trade show booth at a convention, catering for a meeting on campus at a university, or catering services for a wedding in a backyard, everything can be ordered and paid for online. The benefits to guests are convenience, flexibility and enhanced productivity, with no more waiting for a reply to an inquiry or working within the venue’s business hours. The benefits to the venue are increased revenue and reduced costs, as the ordering process does not require the engagement of a salesperson.

“Simplicity, efficiency, and the option for contactless interactions are what we keep hearing over and over in the hospitality industry right now – both from hoteliers and from guests. The modern guest wants to have information at the stroke of a key, and being able to provide them with same level of service and

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information through technology is what is setting organizations apart from their competitors,” said Jason Floyd, general manager, Infor Hospitality. “As events continue to pick up this year and next, having flexible solutions to manage demand will be critical to success. Infor understands the need to automate the entire event booking process, from initial inquiry to the final invoice, which is why we continue to innovate within our technology stack.”

Infor Launches Next Generation of Hospitality Management Solution

27 September 2021

Infor, the industry cloud company, announced the availability of Infor Hospitality Management Solution (HMS) version 3.8.4, the latest release of the fully cloud-enabled hotel management software in the Infor Hospitality suite of solutions. This release is focused on providing new options for optimizing and delivering personalized services. Infor HMS is deployed in the cloud and is accessible in real time, keeping pace with the busy lives and schedules of the modern guest, and enables hotels to tailor a seamless and contactless experience. It provides an intuitive user interface for everyone to manage each stage easily, delivering the most welcoming guest experience.

Specifically, in this version, guests are empowered to manage their check-in and check-out experiences according to preference—often en route and on their phones, requiring minimal contact with hotel staff. This property management system (PMS) functionality helps start and end a hotel stay with convenience, clarity, and care. The focal feature of this release is the newest module, Upsell, which presents enhanced experiences and/or upgraded rooms at check-in. The parameters can be set such that the offers differ by guest type, allowing hoteliers to choose which of their guests will receive upgrade offers. Upselling can drive revenue for the hotel by providing higher average daily rate (ADR)/revenue, higher experience spends for special offerings, and boost guest satisfaction.

As more and more resorts and hotels around the globe look for ways to stay connected with guests without increasing face-to-face interactions, Infor considered the need for enhanced mobile tools in this release to deliver personalized service from anywhere in the hotel. Infor HMS latest release puts the check-in, check-out, and activity booking, dining, spa, etc. in the hands of the guest for a true contactless experience. Partnering with Industry leaders in automated key lock systems, Infor HMS even offers mobile keys through a guest’s app. However, for guests who want a more traditional experience, the enhanced Guest Profile Information Card puts key guest information at the fingertips of the hotelier and front desk staff. This includes guest value, past stays, preferences, and promotional recognition, which allows for a more personal experience at check-in and helps to drive guest satisfaction and loyalty.

“The industry, the business, and the needs of guests are changing. It’s important to have a technology partner that understands this and has the resources to develop new applications that keep pace, and can be quickly delivered via the cloud, to stay agile,” said Jason Floyd, general manager of Infor Hospitality. “Hospitality is a key industry at Infor, and the company continues to show its commitment to current and future customers delivering products and capabilities that uniquely match what the industry is needing at any given time.”

In early 2022, Infor also plans to launch another new module for Infor HMS, the Call Center, which will provide a central view of property availability, rates, and guest information to effectively manage the reservation booking process. The Infor HMS Call Center will have the ability to lower reservation costs while improving guest satisfaction and the profitability of a hospitality enterprise by eliminating manual and duplicate data entry with accurate and reliable reservation delivery, tracking key performance indicators to measure call center productivity, analyzing centralized data to maximize efficiency and profits, reducing training time, and improving the new hire experience through an easy-to-learn user

process.

Infor Hospitality solutions deliver cloud-based multi-departmental hotel management software that touch virtually every area of a business. Specifically, Infor HMS is designed to jump-start an organization's digitalization journey by creating consistently superior guest experiences, boosting revenues, and encouraging return visits. The solution provides easy access to valuable incoming data and empowers management to turn it into action. Infor's HMS latest release is available in English, German, French, Spanish, Simplified Chinese, Arabic, and Japanese, allowing Infor's global customers to immediately benefit from the new features and interfaces.

Infosys and SAP Collaborate to Drive Business Innovation with New Leads and Proposals Solution for the Professional Services Industry

28 September 2021

Infosys, a global leader in next-generation digital services and consulting, announced the launch of the Leads and Proposals Solution as part of SAP's industry cloud portfolio for the professional services industry. This cloud-native business-to-business (B2B) solution, part of Infosys Cobalt, leverages predictive analytics, the SAP® Analytics Cloud solution, and the SAP Conversational AI service, integrated with SAP S/4HANA® Cloud to drive innovation in the professional services sector.

Built on SAP Business Technology Platform (SAP BTP), the Leads and Proposals Solution is a modular industry-specific offering, designed to provide a lean yet intuitive way for enterprises to efficiently track leads, convert opportunities, enable lead nurturing, and manage pursuit cycles. This holistic solution comprises a configurable dashboard to enhance visibility into lead conversion, new clients, and the win/loss ratio. Infosys collaborated with SAP for its expertise and experience in SAP's industry cloud offering, advanced infrastructure, large resource pool, and a plethora of tools and accelerators developed for accelerating transformation programs.

The new solution aims to deliver:

- Reduced analysis and reporting costs due to automated dashboards and KPIs
- Increased delivery quality, and a reduction in unstaffed engagements
- Accelerated lead conversion, and an improvement in revenue growth
- Decrease in missed opportunities, and improved focus on opportunities
- Decline in operational overhead for partners

Dinesh Rao, Executive Vice President and Global Head, Enterprise Application Services,

Infosys said, "Today, professional services firms are constantly faced with challenges in managing and converting leads which in turn, impact their revenue and growth. We are excited to collaborate with SAP to bring this unique solution that will help our customers seamlessly optimize, extend, and transform their core business processes. Infosys's deep domain expertise and proven experience in SAP's offerings will drive our joint vision to deliver better results for our clients. This solution is a great example of how businesses can transform into a Live Enterprise with Infosys and SAP."

Jonathan Rhodes, Global Vice President and Head Professional Services, SAP, commented, "The newly launched solution will add significant value to professional services firms as they look to drive new profitable business. Leveraging key technologies, this agile cloud native solution integrates into the

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overall lead-to-cash process with SAP S/4HANA Cloud, providing streamlined, smart opportunity management. We look forward to continued collaboration with Infosys to create innovative solutions and applications for customers who want to drive cost-effective and sustainable growth in their industry.”

Insight Updates – September 2021 (BIM 360 Update)

22 September 2021

The update for Insight in BIM 360 from Autodesk has been released. This update includes updates to Dashboards, Reports, and Data Connectors. To read the full details please read the Autodesk blog post by Manu Venugopal <https://blogs.autodesk.com/bim360-release-notes/2021/09/22/insight-updates-september-2021/>.

L&T Technology Services expands Intel AI Builders Program offerings with its radiology solution Chest rAI™

30 September 2021

L&T Technology Services Limited, a global leading pure-play engineering services company, announced that its award-winning healthcare solution Chest rAI™ in collaboration with global technology leader Intel Corporation.

Chest rAI™, LTTS’ AI-based chest X-Ray analysis system to assist radiologists in improving speed and accuracy of diagnosis, will be fueled by the Intel OpenVINO Toolkit and AI Analytics Toolkit to run optimized AI inferencing models on 3rd Gen Intel Xeon Scalable processors with built in AI accelerators.

LTTS’ AI-infused solution enables radiologists by fast triaging abnormalities in X-Ray, annotating and automatic report generation with significantly improved performance. The benefits of Chest rAI™ include increased throughput with the ability to extract more actionable information and to reduce waiting time for radiologists.

LTTS recently entered into a strategic engagement with one of the largest teleradiology platform in India - 5C Network Private Limited, wherein 5C Network will leverage Chest rAI™ to empower radiologists with accurate patient insights while saving time.

Abhishek Sinha, Chief Operating Officer and Member of the Board, L&T Technology Services said, “The potential of digital engineering in transforming complex age-old problem statements of the healthcare industry into simpler and more sophisticated mechanisms is now available to all, while maintaining patient data privacy by taking advantage of Intel hardware-enhanced security technologies.

With more investments and by leveraging our engineering expertise in the medical image processing segment, our commitment is to enable a complete transformation of the Indian public health diagnostics services landscape. This collaboration will benefit millions of people not just in the urban but also in the rural areas.”

Sudhir Bahl, Board Member and Chief Strategy Officer, 5C Network said, “Our endeavor is to serve as a reliable diagnostic partner with technology enabled decision-making for the healthcare service providers in India. As the next phase of growth, we aim to empower our radiologists with the best of futuristic technologies so that it not only enhances our quality but also empowers them with technology-based support to achieve clinical excellence with reduced turnaround time. With LTTS’ Chest rAI™ on Intel’s AI stack, we aim to reach elevated industry benchmarks.

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Intel's AI Builders Program is an ecosystem of industry leading independent software vendors (ISVs), system integrators (SIs), original equipment manufacturers (OEMs), and enterprise end users who want to accelerate the adoption of AI across Intel platforms.

Wei Li, VP and GM of Machine Learning Performance at Intel Corporation said, "Wherever customers need AI, Intel is already there with 3rd Gen Intel Xeon Scalable processors and an optimized software stack for the complete AI pipeline. With investments in tools, technologies, and a worldwide ecosystem of optimized solution, we're making AI more accessible than ever. Through the Intel AI Builders Program, we collaborate with companies across the globe to help bring cutting-edge AI solutions and capabilities to market."

LTTS' capabilities on digital technology led new-age innovations for radiologists is industry-leading. Earlier this year, Chest rAI™ was honored by the US-based BIG Innovation Award as an acknowledgement of the path-breaking technology capability possessed by the solution.

MathWorks Introduces Release 2021b of MATLAB and Simulink

28 September 2021

MathWorks introduced Release 2021b of the MATLAB and Simulink product families. Release 2021b (R2021b) offers hundreds of new and updated features and functions in MATLAB® and Simulink®, along with two new products and five major updates. New capabilities in MATLAB include code refactoring and block editing, as well as the ability to run Python commands and scripts from MATLAB. Simulink updates enable users to run multiple simulations for different scenarios from the Simulink Editor and to create custom tabs in the Simulink Toolstrip.

R2021b also introduces new products supporting wireless communications:

- **RF PCB Toolbox**

RF PCB Toolbox enables the design, analysis, and visualization of high-speed and RF multi-layer printed circuit boards (PCBs). RF engineers can design components with parameterized or arbitrary geometry, including distributed passive structures such as traces, bends, and vias. Using the frequency-domain method of moments and other EM techniques, coupling, dispersion, and parasitic effects can be modeled. Toolbox support for ODB++ and databases from Cadence® Allegro®, Mentor Expedition, Altium®, and Zuken enables signal integrity engineers to analyze the high-speed portions of the PCB layout.

- **Signal Integrity Toolbox**

Signal Integrity Toolbox provides functions and apps for designing high-speed serial and parallel links. Users can generate experiments covering multiple parameters, extract design metrics, and visualize waveforms and results. The toolbox supports standard-compliant IBIS-AMI models for statistical and time-domain simulation to analyze equalization and clock recovery.

In addition to the new products, R2021b includes major updates to Symbolic Math Toolbox, Lidar Toolbox, and Simulink Control Design, and other products in the areas of Deep Learning, Reinforcement Learning, Predictive Maintenance, and Statistics and Machine Learning. R2021b is available immediately worldwide.

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OPENPDM 9.3 PROVIDES EVEN MORE LINKS TO THE ALM AND ERP WORLD

28 September 2021

With version 9.3, PROSTEP will this year be presenting the second major release of its OpenPDM platform for PLM integration, migration and collaboration. The main focus of its further development was, on the one hand, placed on improving connectivity to the ALM (Application Lifecycle Management) and ERP world and, on the other hand, enhancing the user-friendliness of the interfaces and reporting functions. Another highlight is the fact that OpenPDM is now even easier to deploy in cloud scenarios.

PROSTEP is currently developing a new connector to the ALM platform codebeamer in close cooperation with the ALM vendor Intland and its own subsidiary BHC, which specializes in ALM/PLM solutions for electronics and software development. The connector for OpenPDM 9.3 is scheduled for release this year. The new version also includes connectors to the ALM solutions Polarion from Siemens and PTC Windchill RV&S (formerly known as PTC Integrity), to the ERP system from IFS to the Primavera P6 software from Oracle, and to Cameo Teamwork Cloud from Dassault Systèmes. PROSTEP has also extended the Windchill connector, which now also supports PTC Windchill's REST interface.

New and further developments include improvement of the export functions and the logic of the connectors to ensure that large data structures can be exported more easily and with a higher level of performance. It is also easier for users to respond to infrastructure problems and trigger automatic retry without administrator support. The mechanism can be managed more finely.

The new semantic check for Business Process Model and Notation (BPMN) offers developers much better support when it comes to defining processes for data synchronization. If inconsistencies are identified, they are alerted to potential problems prior to the first test run with test data. The representation of the process history has also been significantly improved, which is especially helpful when dealing with a large number of processes. They are displayed in the process report in graphical form, thus making it easier for developers to navigate the graphs and interact with the processes.

The file service in OpenPDM 9.3 now also supports the integration of cloud-native solutions such as AWS S3 buckets. In the context of Infrastructure as Code deployment, new and improved templates are available for automatically rolling out OpenPDM in an AWS or MS Azure virtual private cloud. Support is provided for the container solutions Elastic Container Services (ECS) and Elastic Kubernetes Services (EKS) from AWS, as well as Azure Kubernetes Services (AKS). Deployment can be carried out with proprietary languages like CDK as well as with Terraform.

The new release of OpenPDM can be used even more flexibly in heterogeneous IT system landscapes to connect different PLM, ALM and ERP systems with each other without any need for interface programming, as product manager Mirko Theiß points out. "It is also no longer important whether the various IT systems are installed on site at the customer's premises or in a cloud infrastructure."

Oracle Launches SaaS Payroll Service for IGOs and NGOs

28 September 2021

Oracle announced a new payroll solution that will help organizations, starting with Intragovernmental and Nongovernmental organizations (IGOs and NGOs), navigate complex pay rules and policies to efficiently pay any employee, anywhere, in any currency. Part of Oracle Fusion Cloud Human Capital Management (HCM), Oracle Payroll Core is a flexible payroll management solution that enables organizations to easily configure payroll to meet both local and international pay rules in a single

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system. It allows organizations to meet unique business requirements not addressed with traditional payroll solutions.

Traditional payroll solutions are often designed to meet specific country pay rules, but lack the flexibility to manage international pay rules required for organizations like IGOs and NGOs. These organizations manage different pay structures for employees working around the world. For example, they are often not subject to local pay rules like taxes, overtime, or minimum wage but they must adhere to unique international pay practices such as post management and multi-currency. In addition, as some countries don't have complex payroll calculations for social insurance and other taxes to consider, organizations are often required to spend time and resources calculating payroll manually, which increases the likelihood of errors.

Oracle Payroll Core will allow organizations, starting with IGOs and NGOs, to easily configure a payroll system that meets unique organizational needs and pay their workforce in any location. Natively integrated into Oracle Cloud HCM, Oracle Payroll Core can be configured to automatically calculate payroll according to international or local pay rules, using the most up-to-date information about an employee. In addition, by analyzing payroll data alongside other HR data such as skills, demographics, and performance information, Oracle Payroll Core helps organizations gain the insights needed to make more strategic workforce decisions.

With Oracle Payroll Core, organizations will benefit from:

- **Flexible Payroll:** Organizations can easily comply with any combination of international and local pay rules by configuring their payroll calculations to support diverse employee needs regardless of location. IGOs and NGOs can even complete complex payroll operations such as splitting pay across multiple forms of currency so employees can keep savings in their home currency, while paying for local expenses where they are stationed.
- **Simplified Processes:** Organizations can use a single payroll solution to support their workforce worldwide. In addition, they can benefit from features in Oracle Cloud HCM to automatically add new hires to payroll and validate data to help ensure payroll accuracy.
- **A More Empowered Workforce:** Organizations can save time and resources by allowing employees to make changes to their personal information using employee self-service, which alleviates tedious manual processes. This helps employees focus on strategic priorities and meaningful work.

“Oracle Payroll Core will deliver on our vision to help our customers quickly and easily pay their employees anywhere around the globe. IGOs and NGOs conduct lifesaving work and their employees are often ready to uproot their families for the greater good of the global population,” said Yvette Cameron, senior vice president, Oracle Cloud HCM. “Complex and tedious payroll processes take time and resources away from these organizations that could be better spent on the critical services they provide. With Oracle Payroll Core, we are helping these organizations take advantage of the cloud to gain the flexibility and ease of use they need to design payroll processes that meet their unique needs.”

Oracle Payroll Core is the latest addition to the comprehensive payroll capabilities within Oracle Cloud HCM. The payroll capabilities within Oracle Cloud HCM support diverse requirements across organizations, workers, and industries to provide efficient, compliant, and configurable global payroll solutions. In addition, Oracle Cloud HCM enables customers to leverage predefined integrations with their payroll providers to further reduce complexity and cost.

Siemens introduces mPower power integrity solution for analog, digital and mixed-signal IC designs

28 September 2021

Siemens Digital Industries Software today introduced new mPower™ power integrity software for analog, digital and mixed signal IC designs. Available today, the new software is the industry's first and only IC power integrity verification solution to provide virtually unlimited scalability for analog, digital, and mixed signal ICs, enabling comprehensive power, electromigration (EM) and voltage drop (IR) analysis for even the largest IC designs.

mPower software delivers power integrity analysis for all versions of 2D designs, in addition to 2.5/3D IC implementations at any scale, and it easily integrates into existing design flows. Using mPower, IC designers can more quickly and thoroughly verify that their designs meet power-related design goals -- capabilities that can help IC customers dramatically boost quality, enhance reliability and speed time to market.

Unmatched analog functionality; World-class digital performance

Analog ICs convert physical, “real world” data such as sound, motion and video into digital form, making them increasingly critical to a broad range of key applications, including consumer electronics, autonomous vehicles, Internet of Things and other large, fast-growing markets.

For analog IC designers, mPower replaces rough static analysis and SPICE simulation of select nets with an innovative, dynamic solution that delivers highly accurate, simulation-based EM/IR analysis on the largest blocks and chips. Customers using mPower have seen overall runtime improvements vs. their current solution, ranging from 2X faster to actually completing first-pass EM/IR analysis of large analog IP blocks, which was previously impossible.

“Siemens’ mPower allows us to do something we have never been able to do before,” said Dr. Paolo Miliozzi, vice president of SoC Design and Technology at MaxLinear. “And that is to assess EM/IR during tapeout of large analog circuits with confidence.”

In addition to its exceptional analog functionality, Siemens’ new digital mPower scalable EM/IR engines also provide “no compromise” analysis for all-digital IC designs. The digital solution easily integrates into existing design flows, provides world-class power analysis functionality, and requires low per-machine memory – all while allowing designers to complete verification for even the largest digital designs.

“Before using mPower, we could not do a single-run full chip EM/IR analysis on our 1000+ core 64-bit RISC-V AI chip,” said Darren Jones, vice president of VLSI at Esperanto, a leading developer of AI compute solutions. “Using mPower enables us to run our 24-billion transistor 7nm AI chip on our server farm with fewer resources, and with better turn-around time than we previously thought possible.”

The mPower power integrity solution completes Siemens’ overall electro-physical signoff suite addressing power, performance, and reliability analysis. Other offerings in this suite include Calibre® PERC software, PowerPro™ software, HyperLynx™ software, and the Analog FastSPICE platforms. With this comprehensive signoff suite, designers can now use an all-Siemens power integrity design flow.

“Design companies must run both block and full-chip EM/IR analysis to confirm that the power grid delivers the necessary current to the devices, and that wires will not fail prematurely,” said Joe Sawicki,

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executive vice president for Siemens' IC EDA Segment. "With our innovative mPower solution, companies now have a fast, scalable dynamic analysis option for analog, digital and mixed signal layouts of any size, as well as silicon-proven accuracy and fast turns for even the largest digital chips."

What's new in Opcenter Execution Pharma version 6.2.4

29 September 2021

Siemens announced a new version of Opcenter Execution Pharma on their blog. Alessandro Cereseto details the changes to the Pharmaceutical Industry dedicated MES software here

<https://blogs.sw.siemens.com/opcenter/whats-new-in-opcenter-execution-pharma-version-6-2-4/>.