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CIMdata News

CIMdata to Join a Webinar on the Impact of SysML 2.0

30 September 2024

CIMdata, Inc., the leading global research, consulting, and education firm specializing in Product Lifecycle Management (PLM) and the Digital Transformation it enables, is pleased to announce that Don Tolle, Co-Director of the Simulation-Driven Systems Development Consulting Practice at CIMdata, will be a featured speaker in an upcoming webinar organized by PTC. The webinar, “PTC Modeler 10.1 Release: SysML 2.0 and Much More,” will take place on Thursday, 17 October, at 11:00 AM EDT.

In this insightful webinar, Don Tolle and others will delve into the revolutionary impact of SysML 2.0 (Systems Modeling Language) on engineering workflows. As industries increasingly shift towards model-based systems engineering (MBSE), SysML 2.0 is expected to play a critical role in enhancing system design, analysis, and validation processes.

Beyond SysML 2.0, the webinar will also discuss trends in model-based systems engineering (MBSE), offering attendees valuable insights into how these methodologies and tools are shaping the future of systems engineering. Attendees will gain an understanding of how adopting these techniques can lead to significant improvements in the efficiency and accuracy of product development lifecycles.

The webinar promises to provide actionable knowledge for engineers, product managers, and business leaders alike. To learn more about the event and register, please visit https://www.ptc.com/en/special-event/modeler-10-1-launch?utm_source=Cimdata&utm_medium=email&cmsrc=Cimdata&utm_content=webcast-email-Modeler_10.1_Webinar-56154&cl1=webcast-email-Modeler_10.1_Webinar-56154.

CIMdata to Participate in a Webinar on How Increased Product Complexity is Fueling the Adoption of Digital Transformation

3 October 2024

CIMdata, Inc., the leading global research, consulting, and education firm specializing in Product Lifecycle Management (PLM) and the Digital Transformation it enables, announces that executive consultants Don Tolle and Sandeepak Natu, Co-Directors of the Simulation-Driven Systems Development Consulting Practice, will participate in a webinar, “The Value of SPDM to Physics-Based Simulation, Digital Thread, and Digital Twin.” The webinar, organized by Ansys, takes place on Friday, 18 October, at 11:00 AM EDT.

The increased complexity of modern industrial products is pushing businesses to adopt digital transformation, enabled by digital thread and digital twins. This impacts manufacturing companies of every size globally. With digital transformation as the end goal, focusing on “model-based everything,” engineering organizations are challenged to be more efficient, productive, and collaborative using state-of-the-art modeling, simulation, and data analytics tools and processes. The intellectual property contained in simulation models, analysis results,

test results, and design V&V reports must be captured, updated, and managed throughout the product lifecycle in an environment that can be readily shared with and by engineers across multiple disciplines.

Those registering for the webinar will learn about the following:

- How digital transformation is enabled by digital thread and digital twins.
- The impact of digital thread on manufacturing companies.
- How to be more efficient, productive, and collaborative using state-of-the-art modeling, simulation, and data analytics tools and processes.
- How engineers across multiple disciplines are collaborating, speeding time-to-market, and making an impact.

To learn more and register, please visit <https://www.ansys.com/webinars/value-spdm-physics-based-simulation-digital-thread>

Key Sponsors for PLM Road Map EMEA and PDT Europe Announced

2 October 2024

CIMdata, Inc. and Eurostep AB announce the sponsors for the upcoming PLM Road Map & PDT Europe 2024 event. The participating sponsors are Configit, Dassault Systèmes, ESI, Modular Management, PTC, and Razorleaf. The event will take place at the Lindholmen Conference Center, Gothenburg, Sweden, on 23 and 24 October.

"We are excited to have these key solution providers choose to sponsor our PLM Road Map and PDT conference," stated CIMdata's Chief Marketing Officer Cheryl Peck. "We look forward to creating an environment where open collaboration and knowledge transfer can occur between all members of the PLM ecosystem."

As part of the PLM Road Map/PDT experience, sponsors participate in an online Collaboration Café™, where they showcase their solutions. For more information on the Collaboration Café, visit <https://www.cimdata.com/en/education/plm-conferences/2024-plm-road-map-pdt-emea/sponsors>.

PLM Road Map & PDT Europe 2024 is a highly relevant event for PLM industry leaders and PLM professionals. It offers independent education and a collaborative networking environment where ideas, trends, experiences, and relationships critical to the industry germinate and take root. The theme for this year's event is Value Drivers for Digitalization of the Product Lifecycle Insights for the PLM Professional—Why the investment, what are the returns, and how are they achieved?

For more details on the schedule and how to register for the event, please visit <https://www.cimdata.com/en/events/plm-conferences/event/794-plm-road-map-pdt-europe-2024>.

The seven premises of successful digital transformation

27 September 2024

CIMdata's Peter Bilello published an article on [engineering.com](https://www.engineering.com) highlighting the seven premises of successful digital transformation. Peter says, "Ultimately, DT completes the process of digitalization by digitally connecting the enterprise throughout its products' lifecycles so that it can continuously transform itself. DT is about enabling dramatically improved processes, new business models and new value-added products and services to give you a competitive advantage."

Read the full article here: <https://www.engineering.com/the-seven-premises-of-successful-digital-transformation/>

Transforming Construction with Virtual Twin Practices - Powering Modular Construction - a CIMdata Commentary

1 October 2024

Key Takeaways

- Historically, the construction phase of buildings and industrial facilities is plagued with disconnects between stakeholders pushing for changes in construction while suffering from skill scarcity.
- Dassault Systèmes' Modular Construction virtualizes knowledge and know-how in a new approach, "productization," using virtual modules aligned with the objectives of general contractors that can be managed independently of projects and can be reused across many projects, improving quality while saving time and cost.
- Dassault Systèmes' cloud-based modular construction solution uses virtual twin and generative design capabilities to enable general contractors and fabricators to collaborate in real-time based on a single source of data. Stakeholders can procure everything modeled in the twin as well as support construction planning and installation work packages across the extended construction ecosystem.
- Generative design can be used to customize production, where each project is a unique design, while replicable production processes enable faster and higher quality delivery.
- Productization reduces waste and lowers carbon emissions on construction projects enabling better energy performance and helping to better meet sustainability requirements.

Introduction

Environmental regulations today mandate that buildings perform better and require less waste to construct. This shift towards sustainability demands higher efficiency in construction processes and materials. Achieving these goals is complicated by the inherent fragmentation within the construction industry driven by the lack of collaboration among the many stakeholders involved, which can change from project to project. Despite building owners'

demands for compressed schedules, the multiplicity of stakeholders working within their own silos creates inefficiencies that result in projects that suffer from cost and schedule overruns.^[1]

Owners also seek personalized buildings, uniquely designed by architects and engineers to meet specific needs and aesthetics. However, the design and construction processes are typically hampered by disparate software tools and building information modeling (BIM) systems that are not well integrated. Architectural and engineering firms often work in isolation from developers, general contractors, and fabricators, who possess the practical know-how for construction. This lack of collaboration often leads to significant inefficiencies, as designs do not always consider feedback on constructability, resulting in further delays and cost increases.

The construction industry faces what is known as the Architecture, Engineering, and Construction (AEC) paradox, characterized by a widely dispersed and disconnected ecosystem. Unlike discrete manufacturing industries, which benefit from streamlined processes and digital continuity, the building industry comprises a unique set of partners and technologies for each project. This lack of interoperability is reinforced by contractual arrangements that maintain data silos, further exacerbating inefficiencies and making it challenging to manage construction projects effectively.

As a result, construction projects are prone to not only cost overruns and delays but also supply chain shortages, poor resource coordination, difficulties in managing the interfaces and potential conflicts between contractors, and poor construction sequencing. These inefficiencies within the construction industry are further aggravated by the retirement of skilled workers and lack of new entrants into the construction workforce, making skilled workers even scarcer. To address these issues, the industry needs to adopt more integrated and collaborative approaches, leveraging digital technologies to enhance interoperability and streamline project management. Without such changes, the industry will continue to struggle with inefficiencies, waste, and fail to meet the evolving demands of sustainability.

Solution

To address the significant challenges faced by the construction industry, CIMdata believes that leveraging virtual knowledge and know-how through virtual twins of the planned construction effort presents a transformative opportunity. Developing a virtual twin can be time-consuming and may cost as much as 10% of the overall project budget using a more traditional approach, but by leveraging productization, cost can be significantly reduced (up to 30%), and the benefits in time and cost savings across multiple projects and different lifecycle stages can be substantial. For construction execution, one of the major advantages of using a virtual twin is the ability to generate accurate quantity takeoffs for procurement and detailed drawings for fabrication, addressing historical challenges in these areas and leading to more efficient project execution.

Shifting from a bespoke, project-based design and planning method to an approach where knowledge is captured and stored in reusable libraries can significantly reduce risk and improve efficiency. Developers and general contractors can save time and costs while enhancing a project's quality by using these libraries. These repositories capture the expertise of skilled tradespeople, making it accessible to less-experienced workers through detailed work packages

with instructions, which can continually be improved leveraging field experience, ensuring that best practices are consistently applied.

An example of this is FLOVEA, a prefabricated plumbing specialist, which had been challenged with finding skilled plumbers. Using the **3DEXPERIENCE** Platform, the founder, Mr. Thierry Mignot turned to using virtual twins and reusable libraries to manufacture prefabricated back splashes and other plumbing elements, which are light and easy to ship and assemble. FLOVEA was able to prefabricate an easy interface between the plumbing and heating systems reducing the need for skilled laborers.

Generative design approaches that draw from highly constructible products in the library can easily be adapted to an owners' unique requirements to compose a project's construction virtual twin. This virtual representation connects upstream and downstream stakeholders, including engineering, procurement, and site supervision, fostering better collaboration and coordination.

Jet Contractors, a Moroccan-based engineering, procurement, manufacturing, and construction company creates complex shapes and architectural designs for public infrastructure, residential, industrial, and service-oriented programs, including metal works of art. Using the **3DEXPERIENCE** platform, Jet Contractors generated 4,000 unique parts to encase a double curved architecture. With CATIA's xGenerative capability, the team referenced shared geometries and parameters to generate a whole assembly. By using this generative design approach and virtual twins, they improved their manufacturing and assembly processes, which reduced risk, and increased productivity and quality. The developers were able to understand how the design performed in a virtual twin, which enabled automated processes through production and lifecycle management.

By using virtual twins, conflict resolution easily can be considered and addressed early in the process by all construction stakeholders, thereby avoiding costly clashes and on-site issues. The use of virtual twins also enhances the sequencing of construction activities, ensuring that projects are executed more smoothly. Fabricators benefit significantly from this approach, as they can save money by prefabricating modules. This not only drives down their costs but also reduces the overall project time. The integration of virtual twins and modular prefabrication offers a powerful solution to the construction industry's long-standing inefficiencies, paving the way for more sustainable, cost-effective, and high-quality construction projects.

Dassault Systèmes' Modular Construction Solution

Dassault Systèmes' Modular Construction solution provides general contractors and fabricators with the critical information needed to efficiently construct commercial buildings and industrial facilities. The solution focuses on enhancing construction processes by leveraging the concepts of modularity and prefabrication. This is achieved through a virtual twin strategy (see Figure 1), which includes Dassault Systèmes' CATIA, ENOVIA, and DELMIA offerings on a cloud-based platform. By modeling and simulating the virtual twin before physical construction, contractors and fabricators can plan and execute projects with increased precision and reduced risk.

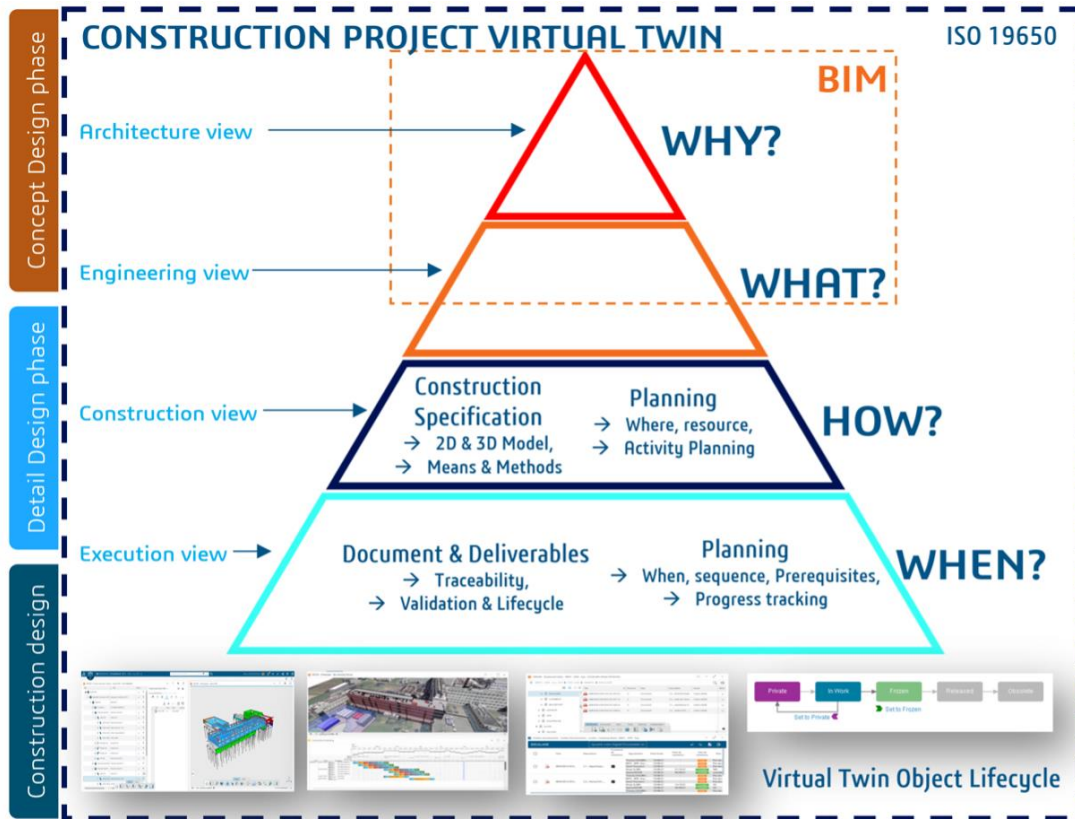


Figure 1: BIM to Construction Virtual Twin
 (Courtesy of Dassault Systèmes)

The virtual twin receives inputs from various technologies used by architects and engineering companies, integrating these inputs to create a comprehensive model for construction. Unlike traditional BIM models used primarily in design, everything that must be procured is modeled in the construction virtual twin and utilized in work packages across many partners. This approach ensures that all necessary components and materials are accounted for, enabling seamless collaboration and coordination among stakeholders. Dassault Systèmes provides a solution that empowers the field, allowing general contractors to choose their preferred construction methods, extract accurate quantity takeoff estimates, and enable them to work more efficiently within the construction ecosystem. Dassault Systèmes’ DELMIA is used to model the virtual twin, detailing everything required for procurement, as well as the resources and timing needed to construct the project most efficiently. This includes supporting a “Productization” approach which virtualizes the knowledge of how things are constructed, enabling the reuse of these libraries across multiple projects, thereby saving time, improving quality, and avoiding redundant work.

By creating a detailed construction model, users can meticulously plan materials, resources, constraints, construction sequencing, logistics, scheduling, and execution. The virtual twin facilitates the creation of detailed work packages and interfaces for construction, thereby eliminating costly conflicts and delays typically encountered in large-scale projects. Rather than relying solely on a project-based approach, companies can virtualize processes for reuse,

dramatically cutting project time. Dassault Systèmes estimates this can reduce project durations by up to 80%.

The solution also enhances offsite prefabrication by enabling fabricators to design prefabricated subsystems, which are then optimized for assembly. DELMIA also supports factory shop floor planning and optimization, improving manufacturing and operational efficiencies. By integrating these advanced technologies and methodologies, Dassault Systèmes' Modular Construction solution significantly enhances the overall efficiency, cost-effectiveness, and quality of construction projects.

Conclusion

Historically, the construction phase of buildings and industrial facilities has been fraught with inefficiencies due to disconnects between stakeholders that are compounded by a scarcity of skilled labor. These challenges often result in delays and cost overruns that compromise project outcomes. Dassault Systèmes addresses these issues with its Modular Construction solution, which virtualizes knowledge and know-how using a new approach called "Productization." By creating virtual modules that align with the objectives of general contractors, this approach allows independent management and reuse across multiple projects, significantly improving quality while saving time and cost.

Dassault Systèmes' cloud-based Modular Construction solution further enhances this process by integrating virtual twin and generative design capabilities. These technologies enable real-time collaboration among general contractors, fabricators, and other stakeholders to collaborate in real-time using a single source of data. This ensures that all elements modeled in the virtual twin are accurately procured, supporting comprehensive construction planning and the creation of detailed installation work packages. CIMdata feels that by fostering seamless communication and coordination across the extended construction ecosystem this solution effectively mitigates many of the traditional pain points in construction projects.

Generative design capabilities add another layer of efficiency by allowing customization of production. Each project can feature a unique design while the production processes can be replicated, achieving faster and higher-quality delivery. This adaptability ensures that each building or facility meets specific requirements while maintaining standardized and efficient processes. CIMdata is impressed with Dassault Systèmes' "Productization" approach, which can significantly reduce waste and lower carbon emissions on construction projects, enabling better energy performance, and helping meet sustainability requirements.

CIMdata believes that Dassault Systèmes' Modular Construction solution offers an innovative approach within the construction industry. By leveraging advanced technologies like virtual twins and generative design, it bridges the gap between stakeholders, enhancing collaboration and improving overall project efficiency. CIMdata recommends those companies in the construction industry looking for a more sustainable and potentially cost-effective approach consider Dassault Systèmes' Modular Construction solution.

[1] Research for this paper was partially supported by Dassault Systèmes.

Acquisitions

Accenture Completes Acquisition of Healthcare Consultancy consus.health

1 October 2024

Accenture has completed the acquisition of consus.health, a leading German healthcare management consultancy. consus.health offers services ranging from medical strategy and patient management to procurement and logistics, infrastructure management and construction planning services. By adding consus.health's strategy and industry consulting skills to its capabilities in digital transformation and managed services, Accenture will enhance its ability to help healthcare providers and hospitals across Germany, Austria and Switzerland improve their quality of care.

The acquisition of consus.health, previously announced on August 27, 2024 adds 140 experts with deep strategy and industry consulting know-how and a strong industry network in the healthcare market to Accenture's Health Strategy & Consulting practice in Germany. Dr Djordje Nikolic, founder and CEO of consus.health will lead Accenture's Health Strategy & Consulting practice in Germany, Austria, and Switzerland and will be responsible to build-up and grow the health provider business.

Sage acquires Anvyl to enhance supply chain technology solutions

1 October 2024

Sage, a leader in accounting, financial, HR and payroll technology for small and mid-sized businesses (SMBs), is enhancing its supply chain software capabilities by acquiring Anvyl, a New York-based technology firm focused on the high-growth \$20 billion supply chain software sector.

With this acquisition, Anvyl's end-to-end supply chain software will allow Sage to deliver a cost-effective Supply Chain Execution (SCE) solution that provides SMBs with complete visibility across their entire supply chains, from purchase order creation to warehouse delivery.

It combines intelligent purchase order management with a broad supplier network to be delivered through Sage Network, which is Sage's platform of products and services that benefits customers by connecting business ecosystems.

Mark Hickman, Managing Director, North America, Sage said: "Our acquisition of Anvyl reinforces Sage's commitment to offering comprehensive back-office solutions for SMBs, particularly in supply chain management. This move aligns with our strategy to expand beyond financials, providing a broader range of tools to help businesses thrive.

"By integrating Anvyl's technology with Sage's solutions, we're enabling businesses to connect with multiple buyers and suppliers, optimize operations, reduce costs, and enhance customer service - helping them stay competitive in the rapidly growing supply chain execution market. This acquisition also brings a highly skilled team from Anvyl, with deep expertise and a proven track record in the supply chain sector."

Rodney Manzo, CEO and Founder, Anvyl, said: “Anvyl is excited to continue its mission as the leading technology for global production. Sage’s acquisition allows Anvyl to deliver world-class supply chain technology to the market, helping operational and production teams save time and manage their supply chain more efficiently. We look forward to being able to continue to support our customers and bring even more innovative products to the market.”

Sandvik exits non-strategic businesses

27 September 2024

At the Capital Markets Day 2023, Sandvik communicated the intention to increase the focus on software solutions and enabling hardware in the Sandvik Manufacturing Solutions offering. Furthermore, Sandvik communicated a revised additive manufacturing strategy to focus mainly on metal powders. As a consequence of these changes in strategic direction, the engineer-to-order business of DWFritz Automation (DWFritz) has been divested and the decision to seek an exit of the minority stake in BEAMIT has been made during the quarter. Charges totaling approximately SEK 390 million will be accounted for in the third quarter and reported as items affecting comparability. Out of the total charges, approximately SEK 250 million relates to a capital loss, including transactional costs, from the divestment of DWFritz, and about SEK 140 million relates to a write-down of the stake in BEAMIT.

Sandvik has divested the engineer-to-order business of DWFritz to the U.S.-based private equity firm Balmoral Funds. Sandvik acquired DWFritz in 2021, with the intention to grow the ZeroTouch® business of DWFritz. The ZeroTouch® platform is a unique inspection gauging equipment enabling near-line and in-line metrology and is an important part of the closed loop strategy. Since the acquisition, Sandvik has developed and started to commercialize ZeroTouch®, which will not be part of the divestment but remain a part of Sandvik.

Additionally, Sandvik has decided to seek an exit of its minority stake (approx. 30%) in the Italian additive manufacturing service provider BEAMIT. The decision to seek an exit is in line with Sandvik’s revised additive manufacturing strategy to focus mainly on metal powders.

DWFritz and the BEAMIT holding have both been reported within business area Sandvik Manufacturing and Machining Solutions.

Company News

Altair Announces 2024-2025 Global Student Contest

1 October 2024

Altair, a global leader in computational intelligence, is thrilled to announce the launch of the 2024-2025 Altair Global Student Contest. The contest is open to all students who want to show off their engineering and design talents for a chance to win recognition and cash prizes. The contest – which will award nearly \$30,000 in cash prizes – will showcase how students are using Altair software to create game-changing innovations, specifically in the fields of robotics and mechatronics.

“This year’s Global Student Contest places a special emphasis on robotics thanks to Altair’s extensive collaboration with *FIRST* over several years,” said Jim Ryan, vice president of global academic programs, Altair. “Our comprehensive technology offering is perfect for students of all levels, giving them the means to bolster their portfolio, sharpen their skill sets, collaborate more effectively, and become Real-World Ready™ by the time they’re ready to launch their careers. Nobody gives students the means to unleash their creativity and inspire innovation like Altair.”

The Global Student Contest will run from October 2024 through June 2025. Students are invited to optimize a robotics application of their choice, which could include a *FIRST*® Robotics Competition (FRC) robot, manufacturing robot, robotic arm, battle bot, or any other robotic system. Optimizations can target electrical, mechanical, structural, lightweighting, motion, or functional aspects, such as using data to enhance the robot's performance during operation.

While students can use any solution from the Altair® HyperWorks® and Altair® RapidMiner® platforms, they are encouraged to utilize at least one of Altair’s most student-friendly optimization tools: Altair® Inspire™, Altair® AI Studio, and Altair® PSIM™. Students must submit a video that explains their project’s methodology and results. At the end of each quarter during the contest period, participants have the chance to win \$2,000 for first place, \$1,000 for second place, and \$500 for third place.

In addition, throughout the contest Altair will award three *FIRST* team sponsorships of \$5,000 each. Teams can earn a chance to win by submitting short, reel-like testimonial videos that explain how Altair tools have helped them and why they enjoy using them. Altair will also name three Altair Student Ambassadorships, which give each recipient a chance to earn up to \$1,000 for their contributions as a student ambassador. More info on the student ambassadorships can be found on the contest’s web page.

“We are delighted to see one of our corporate sponsors offer a global student contest which includes encouraging our pre-university students to apply their skills to building next-gen robotics,” said Scott Legasse, senior manager for corporate relations, *FIRST*. “Altair strives to help students of all ages be real-world ready, and this is another indication that they are focused on that effort.”

FIRST is a global non-profit public charity corporation founded in 1989 with the goal of preparing young people for the future through a suite of inclusive, team-based robotics programs for ages 4-18. The *FIRST* Robotics Competition program debuted in 1992 and operates in more than 28 countries and regions worldwide with participants in grades 8-12. *FIRST* has reached more than 3.2 million student participants around the world since its inception.

To learn more about the contest, including submission criteria and entry forms, visit <https://web.altair.com/global-student-contest-2024>.

American Software, Inc. Changes Name to Logility Supply Chain Solutions, Inc. and Updates NASDAQ Ticker Symbol to LGTY

1 October 2024

American Software, Inc., a leader in AI-first supply chain planning software, is changing its name to Logility Supply Chain Solutions, Inc. (Logility) to align its name with its brand, which is recognized in the industry and around the world. On October 2, the company's NASDAQ ticker symbol will also change from AMSWA to LGTY, aligning with the new name.

As part of this evolution, the company's shareholders approved a reclassification of its dual-class share structure on August 20, 2024 from a dual-class capital structure to a single Class A common stock. This move is a response to feedback from shareholders and proxy advisory firms and is expected to attract a wider range of investors.

"As we continue to innovate and lead in AI-first supply chain solutions, we are excited to align the company name with the brand for which we are globally recognized," said Allan Dow, President and CEO of Logility.

This strategic shift is part of a larger initiative aligned with the company's continued focus on its core competencies. Following the divestiture of non-core assets and the recent acquisitions of AI-powered demand forecasting and network optimization capabilities, Logility is a SaaS leader in supply chain planning and management solutions.

With decades of global supply chain management expertise and experience, Logility is a trusted leader focused on leveraging its history of pioneering supply chain advancements to advance an AI-first strategy that is transforming both the company and the industry. Logility is reimagining the future of supply chain management with a vision that further positions the company as a leader in next-generation technologies but also allows customers to navigate complex global challenges with unprecedented accuracy and efficiency.

CGS'S BLUECHERRY PARTNERS WITH BILLTRUST TO DELIVER ADVANCED AR AUTOMATION AND DIGITAL PAYMENT SOLUTIONS

1 October 2024

CGS, a global provider of software and business applications, enterprise learning, and outsourcing services, announced a partnership with Billtrust, a B2B order-to-cash software and digital payments market leader. Billtrust's advanced cloud-based accounts receivable (AR) automation and digital payment services will be integrated with CGS's BlueCherry Enterprise Suite, which provides comprehensive digital supply chain management solutions.

Billtrust streamlines the order-to-cash process and decreases manual tasks. With Billtrust's extensive implementation experience and its highly skilled financial and technology services team, BlueCherry customers will benefit from industry-leading expertise in financial processes and technology.

"We're constantly adding features and capabilities to the BlueCherry platform that create greater value for clients. Strategic partnerships play an important role," said Paul Magel,

President of the CGS Applications Division "We're excited to welcome Billtrust to the BlueCherry community. This will help clients automate AR processes, improve cash flow, and optimize operations."

"Billtrust's AI-powered solutions help B2B companies reduce friction in their accounts receivable processes and get paid faster," said Byron Biggins, Billtrust's Senior Vice President of Partnerships. "We are proud to partner with CGS to enable BlueCherry users to automatically deliver invoices and accept payments through multiple channels, apply cash in a low-touch process, and collect overdue invoices more quickly and efficiently."

Digital Twin Consortium Unveils Updated Definitions

3 October 2024

The Digital Twin Consortium® (DTC) announced revised definitions for digital twin and digital thread, aligning these concepts more closely with core digital engineering principles. These refined definitions underscore the central role of digital twins and digital threads in advanced digital engineering disciplines and methodologies, highlighting their importance in creating comprehensive, data-driven ecosystems across various industries.

"Our updated definitions reflect the evolving landscape of digital engineering. By aligning our terminology with established digital engineering principles, we're fostering a common understanding that bridges multiple sectors and applications over the digital twin lifecycle," said **Dan Isaacs, GM & CTO of the DTC**. "These revisions underscore DTC's commitment to creating an aligned and more unified understanding of real-world application digital twins that bridge theoretical concepts with practical applications. DTC members are working together to foster greater understanding, more transparent communication for more effective collaboration, and accelerated innovation and adoption throughout the digital twin ecosystem."

"The revised digital twin definition emphasizes synchronization and data, with a model-based approach tied to engineering technology. Grounded in physics, it supports the full life cycle from simulation to decommissioning digital twins. By refining this definition, we enable more accurate, real-time representations, leading to better decisions, improved efficiencies, and deeper insights across industries," said **Dr. David McKee, Co-chair of the DTC Capabilities and Technology Working Group and Lead Author of the DTC Definition Team**. "Intrinsically linked to the digital twin, the refined digital thread definition highlights critical elements, including seamless, secure data flow across the product lifecycle and all organizations, silos, and stakeholders. Focusing on trust, security, and reliability provides digital twins' assured foundation and lifeblood for confident decision-making and continuous improvement."

The DTC's definitions have been updated to more closely reflect the language from the National Academies of Sciences, Engineering, and Medicine, including the emphasis on the mirroring of systems' structure, context, and behavior, dynamic updates, bidirectional interaction, predictive capabilities, and value-driven decision-making, as published in the 2024 Foundational Research Gaps and Future Directions for Digital Twins report.

Honeywell and Chevron Collaborate on AI-Assisted Solutions for Refining Processes

1 October 2024

Honeywell announced a strategic collaboration with Chevron to develop advanced artificial intelligence (AI)-Assisted solutions to help operators make decisions to enhance efficiency for refining processes and improve safety within the industrial automation space.

These are among the new AI solutions Honeywell launched today to assist and help improve operator performance, optimize productivity and increase reliability as companies continue their journey to autonomous operations.

Together, the two companies are leveraging their deep domain knowledge and industry expertise to create a new generation of AI-Assisted alarm management solutions that will help operators make decisions to increase the efficiency, safety and reliability of process operations and industrial assets. The new solutions will include an Alarm Guidance application that provides operators with guided and specific actions to effectively respond to alarms and operational events, helping to reduce lost profit opportunities and process safety incidents. Using AI technology, the system will mine historical data on past actions to identify patterns of alarms and the corresponding operator actions that successfully return the process to normal operation.

"Advancements in AI will change the way companies like Chevron innovate, learn and solve problems at the plant level," said Lucian Boldea President and CEO of Honeywell Industrial Automation. "AI-Assisted automation is key to helping improve industrial plant performance while also addressing industry's workforce shortage through institutional knowledge capture, workflow digitalization, and accelerating the learning curve for the next generation."

Through this collaboration, Chevron's operators will also be able to infuse AI into Honeywell's Experion® distributed control system (DCS), making them future ready and more informed in the control room. The integration of AI to optimize operations to improve efficiency and upskill the workforce also supports Honeywell's alignment of its portfolio to three powerful megatrends, including automation.

The partnership between Chevron and Honeywell marks a significant advancement in the development of solutions that enable AI to assist human operators in plants. By co-innovating AI-enabled operational guidance solutions, both companies are setting new benchmarks for efficiency, safety, and reliability in refining processes. The collaboration is poised to not only address current industry challenges but also to pave the way for future advancements, ensuring that both Chevron and Honeywell remain at the forefront of innovation.

New dedicated AI Unit to integrate AI into Cadmatic software suite

30 September 2024

It is with great excitement that we announce the formation of a dedicated AI unit at Cadmatic. Our goal is to advance our capabilities in integrating AI technologies across our suite of software products and services. The AI Unit will be spearheaded by Madalina Florean.

“While AI is a fantastic field, we see it as a helpful technology that should be tailored to empower engineers and simplify their work; allowing them to focus on what matters: building great products for the real world,” Florean explains.

From ships to plants to construction buildings, our world is built with engineering creativity. While engineers have the know-how and creativity, Cadmatic’s software tools serve as their partners in the design process. According to Florean, AI offers tremendous opportunities to take the user experience of use of Cadmatic software to the next level.

There are immediate possibilities offered by generative AI, such as building a sparring partner to assist with CAD custom scripting and APIs, and using natural language or drawn sketches instead. Furthermore, generative AI can help simplify software use and access to information by enabling users to ask for data in their own natural language instead of navigating UIs with different tables, grids, or pages.

Florean indicates that there are other possibilities that require extra exploration, such as receiving suggestions on design choices or even generating a basic design model. The goal of the newly formed AI Unit is to explore these possibilities and stay true to the Cadmatic credo: empowering engineers. Usability comes before technology.

“I am thrilled that Cadmatic has entrusted me to lead the new AI unit. Over the years, I have contributed in various roles, and now it feels like the perfect moment to leverage my experience in these different roles and nurture a new talented and enthusiastic team. We build software that is used to create products for the real world, and as such, we bear great responsibility for the software we develop. We are committed to exploring the right ways to use AI in the complex use cases of our customers,” says Florean.

Rockwell Automation Teams Up with Circular to Enhance Supply Chain Traceability for Auto, Tire, and Battery Industries

2 October 2024

Rockwell Automation, Inc., the world’s largest company dedicated to industrial automation and digital transformation, has announced a new collaboration with Circular, a leading supply chain traceability solution provider. This effort aims to help customers trace the origin of raw materials from source to final product, ensuring transparency across the entire supply chain while promoting more sustainable practices.

Through this work, Rockwell will offer advanced traceability solutions that enable manufacturers to meet emerging regulatory requirements while verifying the source materials, demonstrating digital chain-of-custody, and tracking emissions. With evolving global regulations demanding greater transparency, Circular’s platform ensures compliance by providing a holistic view of the materials journey – from raw extraction to the finished battery. This empowers customers to not only adhere to regulatory standards but also achieve their sustainability goals, ensuring a more responsible and efficient supply chain.

“In an increasingly competitive and complex market where being sustainable and responsible is a strategic imperative, the combination of Rockwell’s state-of-the-art manufacturing expertise

and Circular's leading traceability and digital product passports provide organizations with the answer to gaining a competitive advantage," said Douglas Johnson-Poensgen, chief executive officer, Circular.

This collaboration also delivers business value beyond compliance. Circular's traceability platform and Rockwell's existing automation systems provide actionable insights that can reduce costs, improve efficiency, and create a competitive advantage in the evolving sustainability landscape.

"Our focus on sustainability aligns with our customers' strategic objectives," said James Glasson, vice president of global industry for auto, tire, and advanced mobility at Rockwell Automation. "This collaboration with Circular allows us to offer a comprehensive traceability solution that not only addresses growing global regulations but also provides unprecedented visibility into supply chain carbon footprints."

Rockwell plans to deploy this solution globally across auto, tire, battery, metals, mining, and cement industries through Kalypso, a Rockwell Automation business. Kalypso will work closely with customers to assess their unique needs, provide consulting services and support the rollout of this innovative solution across their supply chain.

As traceability becomes increasingly critical across industries, this collaboration positions Rockwell and its customers to lead in sustainable practices, driving both operational excellence and environmental responsibility.

SmartPM Announces Hiring of Two New Senior Vice Presidents

1 October 2024

SmartPM Technologies, a leading construction-project analytics provider, has hired two new senior vice presidents to the executive team. Lance Kirby will serve as the Senior Vice President of Client Experience, while Alexandre Teplitxky has assumed the position of Senior Vice President of Marketing.

For two decades, Kirby's primary focus has been accelerating the adoption of BIM and VDC practices with architects, engineers, contractors, and owners. In his new role, he will oversee the post-sales experience, working with each customer to ensure they receive maximum value from the SmartPM platform. He came from Customer Success and Business Consulting at Autodesk and was Director of Customer Success at Building Systems Design (BSD).

Teplitxky has a proven track record of developing successful product and marketing strategies in the construction technology space. As SVP of Marketing, Teplitxky will oversee all efforts and campaigns to raise awareness of the SmartPM brand. Before joining SmartPM, he was the Head of Marketing at ALICE Technologies Inc., the world's first AI-powered construction optimization platform. He also worked at Procore, where he was responsible for new product launches for international markets.

Kirby received his Bachelor of Architecture from the Mississippi State University College of Art, Architecture, and Design. His business skills include Six Sigma, LUMA, Leadership Strategies Master Facilitation, Situational Leadership, and Visual Strategy Facilitation.

Teplitxky obtained his Bachelor of Arts degree from San Diego State University in International Business. He is well versed in a number of business disciplines, most notably Enterprise Marketing, Strategic Marketing, and Branding & Identity.

“Successful solution adoption comes from understanding the customer’s needs and setting expectations about what we will achieve together,” noted Kirby. “Our customers partner with us to solve business problems. Our job in CX is to help guide them to those solutions that will have the biggest impact but require the least effort.”

“Being associated with such a great product and great team is truly a thrill for me,” said Teplitxky. “SmartPM already has a great market presence and is recognized as an invaluable tool for schedule analysis. My goal is to build on that reputation by conveying the product’s capabilities and how instrumental they can be in helping customers deliver more projects on budget and on time.”

SODA.Auto Becomes a Partner of NXP

27 September 2024

SODA.Auto is now an official partner of NXP, a global leader in semiconductor technologies for the automotive industry. As NXP seeks to expand its network of industry-leading software partners, SODA.Auto's expertise in vehicle software development and commitment to pushing the boundaries of automotive technology position it as an ideal partner for NXP's strategic vision.

Trimble Announces 2024 Tekla Global BIM Awards Winners

2 October 2024

Trimble® announced the winners of its 2024 Tekla® Global Building Information Modeling (BIM) Awards. In this biennial competition, the world's most impressive structural construction projects that use Tekla solutions are judged in eight categories on criteria such as Use of BIM and Collaboration, Innovative Use of Tekla Software, Constructibility, Environmental Benefits and Cool Factor. The overall winner for the best BIM project of 2024 is the Kruunuvuori Bridge in Helsinki, an end-to-end BIM project.

Tekla 2024 Global BIM Awards Category Winners

Infrastructure Project Category and Overall 2024 Winner: [Kruunuvuori Bridge, Finland](#)

Promising to be a true landmark at its completion, the Kruunuvuori Bridge in Helsinki will be the longest car-free bridge in the world spanning 1,200 meters. It is a cable-stayed bridge with in situ concrete substructures and a 135 meter-high pylon. The project was a cooperation between the City of Helsinki Urban Environment Division (KYMP), WSP Finland Oy, Kreate Oy, YIT Infra Oy and Ramboll Finland Oy. The project was voted the overall winner of the 2024 Tekla Global BIM Awards as well as the winner in the Infrastructure category.

The tram, pedestrian and bike bridge project features a model-based design from a host of applications (Tekla Structures, Trimble Novapoint, Trimble Connect®, Autodesk® Civil 3D®, Navisworks® and Grasshopper). The team did wind tunnel testing for structural design and

stability testing using both a BIM and a 3D-printed model. IFC format models ensure efficient geometry control for each construction phase, including model-based erection guidance, and BIM and BrIM integration ensures precision, efficiency and transparency throughout the project's lifecycle.

The jury specifically praised that the team is managing the project as a full-blown BIM project, using a multitude of software, and with bidirectional field-to-office and office-to-field connectivity enabling a unique quality in handling the complexity of the project.

Public Project Category: Seattle Aquarium Ocean Pavilion, U.S.A.

In the Public Projects category, the jury was most impressed by the technical challenges the Turner Construction team had to overcome with the Seattle Aquarium Ocean Pavilion project. The 50,000 square-foot exhibit features complex designs such as a shell-like tank with no straight edges based on 229 CNC router-shaped panels and connects to existing city infrastructure.

The team relied on a bidirectional data exchange between Tekla Structures and Rhino and Grasshopper to ensure consistent geometry. The detailed installation sequence drawings and constructability analysis were done in Tekla Structures. In the field, the team could access the latest 3D models using Trimble Connect, and used a cohesive model-based lay-out workflow based on Trimble FieldLink and robotic total stations.

Industrial Project Category: Brewery Roman, Belgium

The Brewery Roman project, entered by Matthieu Gijbels, was the Best Industrial Project category winner. This expansion of one of the oldest family breweries in Belgium started with a 3D scan to generate a high-density point cloud that would serve to identify potential conflicts and fine-tune the model throughout the project. This was crucial in the light of the partial preservation and reconstruction of the building's facade.

The model, generated in Tekla Structures, was shared between the project stakeholders using Tekla Model Sharing. Using Trimble Connect AR, the team ensured that all stakeholders could always access an up-to-date version and view the model as an augmented reality overlay over the camera image displayed on a tablet. The project was characterized by the high level of detail of the model (LOD400) with highly-detailed steel structures and precast concrete elements.

Sports & Recreation Projects Category: Al Hudayriyat Island Velodrome, U.A.E.

The winner of the Global BIM Award in the Sports & Recreation Projects category is the Al Hudayriyat Island Velodrome in UAE. This new cycling track has seating for over 3,500 spectators. ASSENT Steel Industries LLC and Ramboll cooperated on the design of this indoor cycle arena featuring unique elliptical fins and sawtooth cladding on the facade out of aluminum profiles with vision and spandrel glass.

The project met BEP and LOD300 requirements by using a combination of Tekla Structures and Autodesk Revit® in tandem. The Tekla software was used for the connection design, detailing, fabrication and erection and facilitated cooperation between disciplines like facade, RCC and

MEP, enhancing communication and reducing errors through its 3D modeling capabilities. The Tekla software assisted in managing the complex presetting of the more than 2,500 meters of roof, ensuring the right camber after erection.

Commercial Project Category: [Lyyra, Finland](#)

Ramboll Finland Oy, Ylva, Haahtela, Arco Architecture Company Oy and Byggnadsekonomi Oy were winners in the Commercial category for their Lyyra project, a new block of real estate in the city center of Helsinki. The jury especially valued the data-driven nature of the project and the fact that a new city block was built on top of a fully-functional metro station and in between two buildings. This took strong collaboration and coordination between Ramboll as the main structural engineer and Peikko (the steel frame producer). The team applied laser scanning for the initial design and on-site comparison of the as-built situation with the data model in Tekla Structures. The model was shared between the two companies using Tekla Model Sharing and used in a 'live' situation, with workers on site having the models both on tablets or mobile phones and on paper.

Due to the limited amount of space on the job site, all deliveries were just-in-time, requiring a lot of coordination work, which was also model-based. The team applied Deltabeam® Green beams, and recycled 95% of demolition waste on-site to further the sustainability aspect (striving for a LEED Platinum and Well certification).

Small Projects Category: [Te Veld Modular Homes, The Netherlands](#)

The residential project 'Te Veld Modular Homes' from The Netherlands is the winner in the Small projects category. The project revolves around designing and engineering a model of a temporary house. The house was designed specifically for a residential project encompassing a total of 700 semi-permanent homes. The homes feature a high level of sustainability as they are prefab timber structures with some steel elements for structural rigidity.

All co-makers were an integral part of the design and production process. The plumbing and electrical installers drew their installation in the 2D model after which the engineers from prefab builder Barli converted these to 3D for the timber frame production using Tekla Structures. The design by LA Architecten allowed for rapid production and also the delivery planning was optimized for the least waste and impact possible. The Tekla model even included fall protection during the factory assembly, slope insulation, kitchen cabinets and overflows.

Student Projects: [Tomasz Stęplowski \(Wroclaw University of Science and Technology\), Poland](#)

Tomasz Stęplowski of the Wroclaw University of Science and Technology in Poland is the winner of the Global BIM Award in the student category for his design of a funicular-shaped structure of a reinforced concrete hall with the arched girder of the main nave. Tomasz's thesis aimed to find an effective shape for the main part of the structure based on the methods of graphic statics. To test scientist and architect Robert Hooke's observation from 1675: '*as hangs the flexible line, so but inverted will stand the rigid arch,*' he designed not only the arch girder but also other elements of the hall, such as columns, beams, slabs and footings in Tekla Structures.

API Development Projects Category: [Component Code Generator, U.S.A.](#)

In the API Development Projects category, Keyack Technology Solutions won the award for their Component Code Generator, a Tekla Open API-based tool that shortens the time required for programming for coding, building system configurators and setting key variables by over 20% to 30%. Typically, developers spend a lot of time manually finding and mapping variables as well as understanding how to properly set the component input on existing components to put them in the model. The Component Code Generator can read selected existing custom, system, or API-plugin components from the Tekla Structures model to automatically generate a C# method to insert that component.

Public Choice Winner: [Preservation Plaza Canopy, U.S.A.](#)

Of all the 155 entries, the most votes from the general public went to the Preservation Plaza Canopy by Structures Online.

Tekla Global BIM Awards

Overall, 155 projects from 35 countries (which included winners of the 2023 and 2024 regional Tekla BIM Awards competitions) were entered into the global competition. The winners of the Tekla Global BIM Awards were decided by an international expert jury consisting of Andrew Livingstone, research associate at the Center for Offsite Construction and Innovative Structures at Edinburgh Napier University, Rob Roef, senior business developer digital built environment at the Dutch organization for applied scientific research, TNO, co-chair Building Room, BuildingSMART International and chair of buildingSMART Benelux, Aviad Almagor, vice president of technology and innovation Trimble, and Artur Tomczak, bSDD Product Manager for buildingSMART International and PHD Researcher at the Norwegian University of Science and Technology, NTNU.

"Since its inception in 1999, the Tekla Global BIM Awards have shown us the best of the best in BIM and structural engineering," said Jari Heino, vice president and general manager, BIM & engineering division at Trimble. "Moreover, the entered projects have shown how broad the field of application is for our Tekla Structures software and other Trimble technologies. The projects share richness in quality, detail, functionality and sustainability. The Student category proves again that a new generation is talented in applying BIM technology and driving future success in the structural engineering trade."

Trimble Opens Technology Lab at Florida A&M University, Marking New HBCU Collaboration

3 October 2024

Florida A&M University (FAMU) and Trimble celebrated the grand opening of the new Trimble Technology Lab at the Tallahassee campus on October 2.

This event marks a major milestone as FAMU becomes the first Historically Black College and University (HBCU) to host a Trimble Technology Lab (TTL). The lab at FAMU is set to revolutionize the learning experience for students in architecture and construction engineering by providing access to state-of-the-art technology and software solutions.

"Trimble's generous support will equip our students and faculty with state-of-the-art technology, while setting a historic precedent," said Andrew Chin, Assoc. AIA, dean, FAMU's School of Architecture & Engineering Technology. "We are honored by a gift that demonstrates a commitment to cultivating a diverse and technologically proficient generation of architects and engineers."

In addition to the donation of software and hardware technologies from Trimble, the Trimble Foundation Fund — Trimble's philanthropic donor-advised fund — provided a grant to support the renovation and refurbishment of classroom spaces to house the new labs. FAMU is the first institution to be a recipient of a grant from Trimble Foundation Fund in connection with the establishment of a Trimble Technology Lab.

"Establishing our first technology lab at an HBCU underscores our commitment to fostering a more diverse and inclusive construction workforce," said Amy Northcutt, director of education and outreach at Trimble. "By partnering with Florida A&M University and providing a grant from the Trimble Foundation to support facility renovations, we aim to create a more equitable environment in the industry. This initiative ensures that FAMU students have access to cutting-edge resources and tools, enhancing their education and preparing them for successful careers in construction."

"The facilities grant from the Trimble Foundation offers a distinctive opportunity for FAMU students to access cutting-edge technology in the construction industry, enhancing their competitiveness in this rapidly evolving field," said Doreen Kobelo, Ph.D., director of the division of engineering technology at FAMU. "Given the limited funding for capacity building, this grant allows for significant student advancement through solutions that would otherwise be inaccessible with state funding. This initiative will increase the number of underrepresented minorities equipped with expertise in advanced construction design and management solutions."

The lab includes a broad range of Trimble's industry-leading geospatial and construction solutions such as the Trimble® Ri robotic total station and XR10 HoloLens hardhat as well as advanced software solutions including RealWorks® scanning software, Trimble Business Center Infrastructure Construction edition, Tekla® Structures, Tekla Structural Designer, Trimble Connect® AR interactive collaboration software, and the company's popular 3D modeling solution, SketchUp®.

Wellspring accelerates growth trajectory with key C-Suite appointments following Sopheon acquisition

2 October 2024

Wellspring, the world's leading provider of Tech Transfer, Intellectual Property Management, and Innovation Management software solutions, announced significant leadership appointments following its recent acquisition of Sopheon, a major player in enterprise innovation management solutions.

These strategic hires are set to enhance Wellspring's position as a leader across the innovation management ecosystem. The newly appointed leadership team, composed of industry veterans with deep expertise in technology, is expected to spearhead these efforts.

"Wellspring is thrilled to announce three new leaders joining its executive team to drive our ambitious growth plans and support the next generation of products," **said Sean Downs, CEO of Wellspring.**

"At Wellspring, we recognize that innovation is at a crossroads, and we are leaning into that change to bring revolutionary technology that shapes the future of innovation. Our solutions empower organizations to unlock new possibilities, streamline operations, and drive impactful change."

Jacob Chappell, Chief Revenue Officer

Jacob brings over two decades of experience in scaling companies and executing successful go-to-market strategies that maximize revenue potential in the SaaS industry. As a seasoned revenue leader, Jacob has a strong track record of driving revenue growth and building scalable, repeatable systems in very competitive markets. Most recently, Chappell led the go-to-market and revenue organization at SOCi, where he joined the founders and took the company from startup to over \$100 million annual recurring revenue (ARR). His experience in managing the entire customer lifecycle, domestically and internationally, will be instrumental in propelling Wellspring's growth trajectory. Jacob will be focusing on up-leveling Wellspring's go-to-market functions and aligning with marketing to open up even more sales opportunities and drive long-term growth.

Sean Reiter, Chief Marketing Officer

With over 20 years of experience, Sean Reiter has a proven track record of driving exceptional growth in high-growth SaaS technology companies. At a leading ecommerce technology company, he spearheaded a marketing strategy that increased ARR 6x in just four years. Before that, Sean led a high-performance marketing team at Pushpay, a donor management platform for nonprofit organizations, where ARR grew from under \$10 million to over \$100 million during his time there. His expertise in building and leading marketing organizations positions him to elevate Wellspring's marketing efforts, continuing his legacy of rapid growth and innovation. At Wellspring, Sean will be focused on building a full-funnel marketing program to drive demand generation and a unified innovation brand story across the business.

Scott Lindeman, Chief Financial Officer

Scott brings a wealth of SaaS growth experience, providing expertise in sophisticated forecasting, cash management, and SaaS metrics. Scott led the finance teams at Degreed and Domo, where he played a pivotal role in scaling tremendous top-line growth, raised over \$500M, and built high-performing accounting and finance teams. He has integrated twenty-five acquisitions during his career, totaling over \$11 billion. Lindeman is skilled in going public, including an IPO and a secondary offering totaling \$700 million. He will leverage his deep financial acumen and expertise in scaling operations to drive Wellspring's global strategic growth. Scott will be focused on streamlining financial processes, optimizing existing ones, and working across the business to fuel growth.

Financial News

Invitation: Presentation of Sandvik's report of the third quarter 2024

30 September 2024

Sandvik will publish its third quarter results on Monday, October 21, 2024, at approximately 11:30 AM CEST.

A combined webcast and conference call for investors, analysts and financial media will be held at 1:00 PM CEST. The report will be presented by Stefan Widing, President and CEO as well as by Cecilia Felton, CFO.

The presentation will be broadcasted live on our website home.sandvik

Dial-in details for the conference call:

SE: +46 (0) 8 505 100 31

UK: +44 (0) 207 107 06 13

US: +1 (1) 631 570 56 13

From about 12:30 PM CEST presentation slides will be available on our website home.sandvik

Nano Dimension Announces Strong Preliminary Q3/2024 Results

3 October 2024

Nano Dimension Ltd. ("Nano Dimension" or the "Company"), a leading supplier of Additively Manufactured Electronics ("AME") and multi-dimensional polymer, metal & ceramic Additive Manufacturing ("AM") 3D printing solutions, announced its revenue, on a preliminary basis, for the third quarter ended September 30th, 2024.

Nano Dimension reported unaudited approximated consolidated revenues of \$14.7 million for Q3/2024, a 21% increase over Q3/2023.

Yoav Stern, Nano Dimension's Chief Executive Officer and member of the Board of Directors, said: "With all this energy about our agreements to acquire Desktop Metal, Inc. (NYSE: DM) and Markforged Holding Corporation (NYSE: MKFG), let's not forget the performance of our core business, which posted preliminary results of \$14.7 million. The 21% growth year-over-year characterizes the efforts of our team to continue to stay focused on revenue generation and delivering added value to our customers. Our shareholders should have confidence that the Nano Dimension teams are not "taking their eyes off the ball."

The information contained in this release reflects preliminary estimates with respect to certain financial results of Nano Dimension for the third quarter ended September 30th, 2024, based on currently available information. The final third quarter results may vary from the preliminary estimates.

Implementation Investments

ALICE Partners with Andrade Gutierrez to Optimize Industrial Construction

25 September 2024

ALICE Technologies (ALICE) and Andrade Gutierrez (AG) – one of the largest construction and engineering companies in Latin America – announced that Andrade Gutierrez has selected ALICE for use on its construction projects. This collaboration will enable AG to leverage ALICE’s technology to optimize the planning and execution of its construction projects, driving greater efficiency while reducing project risks.

Headquartered in Brazil, AG has a strong reputation for innovation in the construction industry, as demonstrated by its five-time win of the Valor Innovation Award. Some of the company’s notable construction projects in Latin America include the world’s fifth largest natural gas facility, Gas Natural Açú; the world’s third largest hydroelectric mega-dam, Belo Monte; and the rebuild of the Maracanã Stadium for the 2014 World Cup, along with three other football stadiums. The company is well known for its extensive portfolio of heavy engineering projects comprising over 1000 projects such as, the construction of dams, thermoelectric plants, highways, airports and railways, hydro plants, nuclear power plants, and mining.

ALICE’s construction schedule optimization platform enables construction firms like AG as well as owners, consultants worldwide to leverage AI to plan, bid, and build complex capital industrial, infrastructure and commercial projects more efficiently and with reduced risk.

The company has started integrating ALICE into its project planning process. With the adoption of ALICE, the company expects to significantly improve its ability to explore and optimize various construction strategies and scenarios, greatly impacting both the speed and accuracy of its planning efforts.

“The use of AI during the proposal phase of contracts allows for a broader range of scenarios due to the increased processing capacity, in a much shorter time frame compared to previous methods,” says Henrique Nunes, a leader within the company’s data analytics group at Andrade Gutierrez.

Recently, Consag, one of the companies within the Andrade Gutierrez Group, began leveraging ALICE within its bidding organization to aggressively pursue new tenders and win more work for the company.

“We can see how AI employed in the tool quickly simulates various construction execution scenarios with schedules linked to costs. After the diagnosis, it became clear that the tool’s applicability within the company could bring agility to decision-making processes and improve the quality of planning carried out in projects and proposals,” adds Nunes.

According to the company, the speed at which multiple strategies and scenarios can be simulated has been reduced from more than two weeks to minutes. This has significantly optimized the time spent by planners and schedulers and provided an opportunity to mitigate

risk and to perform deeper studies of the project, leading to greater accuracy in the adopted construction sequences.

René Morkos, Ph.D., CEO and founder of ALICE Technologies added, “Previously, the AG team planned only a limited number of scenarios due to the amount of time required by traditional methods. This is what sets ALICE apart from traditional planning tools—by enabling AG to simultaneously explore multiple construction scenarios and automatically generate risk-reduced schedules within minutes. Because ALICE is parametric, this allows the AG teams to dynamically adapt its schedules as project conditions change, offering a level of agility and efficiency that is just not possible with traditional tools.”

“ALICE assists us in identifying the best sequence for executing the project, speeding up scenario generation and enabling decision-making based on cost and time variables. The tool also significantly contributes to the training and development of planners, offering deeper insight into the schedule network, as the planning process becomes focused on the project's actual constraints. This allows the AI algorithm to propose sequencing that best fits the project's reality,” says Maurício Schneider, engineering manager responsible for implementing the tool within the company.

According to Schneider, so far, the company has achieved—and even exceeded—some expected metrics anticipated by their clients, having already applied the technology in highway, railway, port, solar farm, and thermal power plant during the bid phase and to support ongoing construction.

“With the help of technology combined with our professionals’ expertise, we seek a qualitative and quantitative leap in planning deliverables. This is a considerable competitive advantage over our competitors, adding the value sought by Consag and our clients,” Schneider concludes.

René added, “As the Latin American construction sector gears for a surge in capital projects, Andrade Gutierrez is setting a new standard for innovation in the way construction projects are planned and executed through AI-driven solutions like ALICE. We are excited to partner with Andrade Gutierrez to execute on their vision of digitization with AI.”

Building on the success of this partnership, Andrade Gutierrez expanded their usage of ALICE by deploying it on the planning and construction of a major Thermoelectric Plant, Portocem, in Brazil.

Apollo Tyres accelerates R&D processes with CONTACT Elements

2 October 2024

Leading Indian tire manufacturer Apollo Tyres Ltd relies on CONTACT Elements as its central platform for product development and testing. The low-code solution will foster collaboration, harmonize processes across locations, and support Apollo Tyres in meeting its sustainability goals.

Rising sustainability requirements and the dawn of e-mobility demand for tires with low rolling resistance made from eco-friendly materials. Apollo Tyres has set out to increase the percentage of sustainable raw materials used in their products to 40% by 2030. To achieve this

goal, the company relies on a data-centric strategy and is implementing a new Laboratory Information Management System (LIMS) based on CONTACT Software's CIM Database PLM.

It takes about three years to develop a new tire. CONTACT's solution is intended to speed up this process and foster collaboration and communication among teams. It will digitally support and harmonize global R&D processes, streamline test data management, improve traceability of tire specifications, and simplify materials management.

The LIMS combines specification and test management. Specification management supports the development process from raw material to the final tire, including recipe management. Test management supports Apollo's engineers in capturing test parameters, instructions, and comprehensively analyzing test results. The solution integrates company-wide distributed data into a single source of truth, which reduces manual efforts, prevents errors, and minimizes dependency on tools like Excel.

CONTACT's solution includes document management, Bill of Materials management, and reporting. The integrated project management allows users to efficiently execute projects and track their progress. Interfaces to an ERP system and laboratory equipment enable automated data exchange, while end-to-end processes foster cross-department collaboration from research all the way to marketing. Templates reduce manual efforts for routine activities, while workflow management accelerates requests for sample manufacturing and testing.

"As a modular platform, CONTACT Elements allows us to grow our solution organically in a 'start small, think big' approach," says Hizmy Hassen, Chief of Digital and Supply Chain Officer at Apollo Tyres. The system will be rolled out at Apollo's Global R&D Centres, first in India and subsequently in Europe. As part of the rollout, processes across the development facilities in Chennai, India, and Enschede, Netherlands, will be harmonized.

With 19,000 employees and a revenue of US\$ 3.1 billion, Apollo Tyres is among the world's leading tire manufacturers. The company specializes in developing and producing tires for cars, motorcycles, trucks, and agricultural vehicles, which it sells under the brands Apollo and Vredestein. Apollo Tyres Ltd operates seven manufacturing facilities and two research centers across India and Europe.

Aurigo Software to Digitize Capital Improvement Program for the City of Sacramento

24 September 2024

Aurigo Software, the leading provider of capital planning and construction management software for infrastructure and private owners, has entered into a multiyear contract with the City of Sacramento, California. The partnership aims to modernize the planning and execution of the agency's capital improvement program. The City will implement Aurigo's flagship product suite, Masterworks, to digitally manage all aspects of program delivery, including construction administration, financial management, and progress tracking.

Sacramento, the capital city of California, has a population of 518,161 and operates under a City Council–City Manager form of government. The City oversees an annual capital budget of

\$114.8 million and supports a workforce of over 5,000 employees. Its responsibilities include managing public works functions such as transportation and water management, as well as parks and recreation, fire and police protection, and other community services.

“As public agencies continue to embrace digital transformation, we are honored to partner with the City of Sacramento to streamline their capital program lifecycle,” said Balaji Sreenivasan, CEO and founder of Aurigo Software. “Masterworks will help the City manage long-range capital plans, ensure the right investments are made, and speed up decision-making for agency leadership.”

Masterworks offers the agency a unified end-to-end solution for managing, collaborating, and reporting on projects efficiently, thereby improving productivity. The product suite will provide a robust configuration engine to build seamless workflows that automate the City’s processes, including digital approvals and signatures.

Built-in open APIs will enable Masterworks to integrate with the City’s existing technology solutions, such as PeopleSoft Financials, ensuring a flexible and consistent method for associating, updating, and combining project funds. The system will also connect with the agency’s Geographic Information System, enhancing the quality of real-time data available to all stakeholders.

The City of Sacramento joins Aurigo’s growing customer list of agencies across North America—including the cities of Seattle, Portland, and Las Vegas, as well as regional agencies in Colorado, Florida, and Ontario, Canada—using Masterworks to modernize their capital programs. The company has seen an increase in demand from the public sector as agencies take advantage of funding from the bipartisan Infrastructure Investment and Jobs Act passed in November 2021.

Caterpillar and Trimble Extend Long-Standing Joint Venture to Accelerate Grade Control Innovation and Customer Adoption Across the Construction Sector

2 October 2024

Caterpillar Inc. and Trimble announced the extension of their long-standing joint venture. The agreement includes expanded distribution of grade control solutions in the construction sector to accelerate innovation and customer adoption.

Since 2002, the Caterpillar Trimble Control Technologies (CTCT) joint venture has led the industry in grade control solutions, delivering products that contribute to jobsite safety and productivity.

The renewed agreement will increase industry reach and provide customers broader availability of interoperable grade control solutions via a flexible platform for use by Caterpillar, Trimble and other technology providers and equipment manufacturers. With a strengthened partnership, this agreement enables both Trimble and Caterpillar to increase innovation and differentiation, develop new offerings and pursue new industry and geographic opportunities.

For Caterpillar customers, there are more ways to access the technology:

- Factory-fit grade options through Caterpillar

- Cat® Grade 3D Ready options allow upgrading at any point within the machine lifecycle
- Expanded aftermarket and digital offerings directly through Cat dealers

Trimble customers also benefit from broader availability:

- Continued mixed-fleet support from trusted SITECH® dealers
- Expanded distribution network to reach and meet the needs of mixed fleet customers
- Streamlined access to grade control through Trimble Construction One™ suite of digital solutions further extends Trimble's construction technology ecosystem

"Trimble's Connect & Scale strategy has created an ecosystem that empowers customers across both the physical and digital worlds. The next phase of our joint venture will drive innovation in grade control technology to expand the industry opportunity with localized and differentiated solutions while improving technology interoperability," said Rob Painter, president and CEO of Trimble. "This partnership underscores a joint commitment to connect the office and the field throughout the design-build-operate lifecycle of construction projects."

"Caterpillar and Trimble have a long history of innovating together," said Tony Fassino, Caterpillar Construction Industries group president. "We are proud of what we've developed to help customers optimize their operations, including grade control. Today's announcement is a continuation of this collaboration. With a focus on accelerating this leading-edge technology, we are committed to making it easier for customers to acquire and adopt our solutions across Cat and mixed fleets alike."

Dalene Flooring Integrating Kahua Analytics into Construction Project Management Processes

2 October 2024

Kahua, a leading provider of capital programs and construction project management information solutions (PMIS), announced that Dalene Flooring is now utilizing Kahua Analytics for its flooring projects.

Dalene Flooring is an award-winning, fourth-generation flooring retailer/installer headquartered in Connecticut. A customer since 2021, Dalene flooring has reenergized its PMIS usage with new Kahua features and workflows that heighten the subcontractor experience. These capabilities include the new Kahua Analytics app to coordinate both upstream and downstream bids.

Because Kahua is configurable to any customer's needs, several reporting dashboards were tailored for Dalene Flooring's preferences and will be of benefit to all subcontractors. Kahua and Dalene's ongoing relationship will allow for additional customizations and more robust analytics via future dashboards.

"What Kahua Analytics means to us is that day to day, we can manage what's going on in real time instead of setting hours aside to run reports and compile them," Dalene Flooring COO

Gordon Crunden said. “We don’t get paid to manage our business; we get paid to perform our business. In order to perform our business, we need to manage it.

“The quicker we can do that, the more productive we – as leaders – can be, the more productive our team can be, as we are coaching them in the right direction. For us to have good accurate info at a few clicks of a button is invaluable.”

He added that Kahua has created perfect dashboards for Dalene’s project management, “allowing us to make more informed business decisions.”

Crunden also said Kahua Analytics integrates data from various sources within his organization, ensuring all relevant information is consolidated and accessible, helping Dalene Flooring monitor key performance indicators and identify areas for improvement.

By integrating Kahua Analytics into its workflow, Dalene Flooring enhances its ability to manage projects, track performance and plan for the future based on robust data analysis.

Kahua President Brian Moore said, “We are able to provide out-of-the-box analytics for a subcontractor that covers new construction, maintenance and safety. Most subcontractors do not have access to data scientists to pull this type of analytics together to help executives gain more insight into their operations.”

Dan Post Finds a Perfect Fit in Centric PLM

1 October 2024

Centric Software® is pleased to announce that iconic western boot brand Dan Post Boot Company has selected Centric PLM™ to optimize product data management, efficiency and transparency. Centric Software provides the most innovative enterprise solutions to plan, design, develop, source, buy, make, price, allocate, sell and replenish products such as fashion, outdoor, luxury, multi-category retail, grocery, food & beverage, cosmetics & personal care and consumer electronics to achieve strategic and operational digital transformation goals.

Founded in the 1960s, Dan Post boots are synonymous with superior fit and fashion-forward design. Their handcrafted method starts with the finest exotic skins and premium leathers handled by the finest designers in the world. The company produces approximately 150 new styles each year through their two brands: Dan Post and Laredo.

With an increasing amount of sampling, sourcing, materials and design data to juggle, they turned to an ‘all-in-one’ ERP and PLM solution in 2016. However, they ran into limitations and began to re-evaluate their PLM decision. Having had a positive experience with Centric Software over a decade earlier, they chose to go back to Centric PLM.

“Our old PLM solution was not web-based. We couldn’t access it from anywhere, it was slow and users would get bogged down,” explains Stephanie Greenfield, Director of Product Development at Dan Post. “User adoption was low and we went back to a more antiquated way of doing things using shared documents.”

Dan Post considered several options, but selected Centric PLM based on past experience, user-friendliness and ability to scale with the business.

“We needed to get back to a PLM that we knew would work, and that designers would like to use,” Greenfield says. “Because PLM is a primary focus for Centric, we can rely on future innovation and updates to the solution.”

Dan Post has just begun implementing Centric PLM, and the team is anticipating changes, says Greenfield.

“One of the great things about Centric is that we can easily update it when we’re on the go. Because we will have all the information in one central place we will be able to generate line sheets very quickly. Our production and sourcing teams will be able to track material usage and hold factories accountable for the time period it takes to get samples made. There are many exciting possibilities for leveraging data to make future decisions, once we get it all into one system.”

“Working with the Centric team is great,” she concludes. “The follow-through has been awesome and they are very, very thorough.”

“We are delighted to welcome Dan Post as a returning customer,” says Chris Groves, CEO of Centric Software. “Dan Post is known for attention to detail and commitment to quality, and we are equally dedicated to making sure that their PLM implementation is a perfect fit. We look forward to working with Dan Post as they streamline and scale their business.”

Drayton Aerospace Selects EmpowerMX from IFS to Boost MRO Operations

25 September 2024

Drayton Aerospace Porto Alegre (POA), a global leader in civil, freight aviation Maintenance, Repair, and Overhaul (MRO), has selected EmpowerMX from IFS to plan, execute, and optimize its operations. This collaboration aims to enhance return on investment (ROI) and deliver transformative efficiency gains by optimizing the utilization of resources. Key benefits include predictive control over maintenance turnaround times, improved management of risk factors, and heightened customer satisfaction.

EmpowerMX from IFS is a recognized asset and service management software solution for leading independent third-party MROs. It is a perfect fit with Drayton’s vocation for providing value, quality work and world-class service to commercial airlines and freight operators.

With a comprehensive roll-out plan over the next few months, the Drayton POA team will use IFS EmpowerMX to implement its vision of introducing proven MRO best practices to transform maintenance operations through cloud-based, mobile-first technology. It will play a key role in the efficiency of the business well into the future and be pivotal in their focus on becoming a world-class, third-party MRO centre of excellence.

Alcides Conter, General Manager at Drayton Aerospace commented: *“Drayton Aerospace is trusted around the globe by airlines, governments, and OEMs, and is at the forefront of aviation services for the commercial aviation sector. It’s because of this that we chose EmpowerMX from IFS as we believe we have a great opportunity to improve planned and predictive maintenance of our assets, so that our own customers benefit from safer, more available aircraft.”*

Dinakara Nagalla, Head of EmpowerMX at IFS commented: *“This partnership combines the expertise of IFS and Drayton Aerospace to manage the digitization of maintenance operations and significantly improve business efficiencies. IFS has unparalleled experience in commercial aviation, including end-to-end aviation maintenance solutions ensuring airworthiness and efficiency across entire fleets.” He continued: “It’s why airlines and air operators trust IFS to keep aviation maintenance efficient and predictable, and most importantly, aircraft airborne.”*

Faraday Enhances 3D-IC Design Service with Ansys Multiphysics Analysis

2 October 2024

Faraday Technology Corporation, a leading company in the semiconductor industry, is expanding its use of Ansys technology to enhance its capabilities in developing advanced designs for multi-die 2.5D/3D-ICs — critical for artificial intelligence (AI), IoT, and 5G applications. With support from Ansys, Faraday will empower its customers to explore more robust design options for more innovative products.

Faraday, a leading application specific integrated circuits (ASIC) design service and IP provider, supports customers with chip design projects. Recently, Faraday announced a 2.5D/3D-IC advanced package service to address exploding demand for multi-die designs that target products with better performance and lower power consumption. To meet this demand, engineers need the right multiphysics analysis tools to verify that chip designs include reliable signal and structural integrity and reliable power distribution before it goes to fabrication. This challenge is compounded by the trend toward developing denser chips that are more vulnerable to EM issues.

Adding RaptorX into the design flow will enable Faraday to increase precision and efficiency in its development process. Moreover, it enables predictively accurate EM modeling and analysis for advanced 3D-IC products, ensuring data transfer meets stringent modern standards. This will improve the design's fidelity, enhance performance and reliability, and accelerate time-to-market.

“Our extensive silicon IP allows our customers to start designing from a solid foundation, enabling them to focus solely on innovation and differentiating themselves in the market,” said C.H. Chien, vice president of R&D at Faraday. “Fabrication is exceptionally expensive and there is no room for error. So, keeping the overall project cost low is paramount, and it starts with the initial design. With the addition of RaptorX in this phase, we can offer customers an efficient workflow that includes design verification and signoff as well as access to top-tier test and fabrication services, removing doubts about the chip’s performance and longevity.”

“Ansys’ focus on multiphysics platforms enables innovators like Faraday to address key challenges for 3D-IC and accelerate their time-to-market,” said John Lee, vice president and general manager of the semiconductor, electronics, and optics business unit at Ansys. “Our industry-leading tools facilitate meticulous modeling and analysis of electromagnetic phenomena, helping our customers remain at the forefront of technological advancements in 5G, AI and IoT.”

Genesis Energy Improves Data Governance by Unlocking Business Value with Informatica's AI-Powered Intelligent Data Management Cloud Platform

1 October 2024

Informatica, a leader in enterprise AI-powered cloud data management, announced that it has been chosen by leading New Zealand utility company, Genesis Energy, to provide sustainable and secure data-driven business practices.

Genesis Energy has a diversified generation portfolio and nearly 500,000 customers for electricity, reticulated gas and LPG. The company aims to use quality data to drive internal efficiencies and to help customers on their energy transition journey. To prepare for more advanced data and AI solutions, Genesis Energy is looking to consolidate and streamline data from a complex and distributed ecosystem that included a data warehouse, data lake and various proprietary data solutions supporting its generation and retail operations. The utility provider is also seeking better availability and flow of data between business units.

To address these issues, Genesis Energy decided to implement Informatica's Cloud Data Governance and Catalog, underpinned by Informatica's AI-powered Intelligent Data Management Cloud™ (IDMC). Leveraging the common metadata foundation within IDMC as a platform to support data management, Genesis Energy is able to achieve a modern, centralized, scalable and robust data governance framework.

Angela Zhao, Platform Owner of Genesis Energy's Data Governance and Quality team, said, "Quality insights start with quality ingredients, which means quality data. With the robust governance structure we've put in place with Informatica, we can connect and validate data across our systems and applications while protecting sensitive information. This will improve trust in the data for decision making to drive greater business outcomes and organizational efficiency."

Alex Newman, Country Manager for Informatica Australia and New Zealand, said, "By implementing a modern cloud-based, AI-powered data governance solution, Genesis Energy enables one source of trusted truth that transforms how data is managed and used. This ultimately improves their product and service for customers."

HUGO BOSS Partners with Centric Software to Support Ambition to Become Leading Premium Tech-Driven Fashion Platform worldwide

26 September 2024

Centric Software® is pleased to announce that HUGO BOSS has selected Centric PLM™ and Centric Visual Boards™ to fuel their digital transformation through their digital TWIN program.

HUGO BOSS, headquartered in Metzingen (Germany), is a leading global fashion and lifestyle company in the premium segment of the global apparel market. The company pursues a portfolio strategy, with the HUGO BOSS platform consisting of two globally renowned brands – BOSS and HUGO. Both brands are clearly distinguished by individual characteristics. At the same

time, they share equally high standards in terms of quality, innovation, and sustainability, while ensuring that consumers are perfectly dressed 24/7 and for every occasion.

As part of the company's growth strategy, which is closely linked to the vision of being the leading premium tech-driven fashion platform worldwide, HUGO BOSS has embarked on a multi-year journey to build a Digital Value Chain TWIN, which enables smart decision-making by connecting product creation, planning and execution, from demand to supply.

"Our TWIN program builds the backbone of our tech-driven value chain. We made PLM a core focus of our TWIN program as a 'single source of truth' and end-to-end system where our data is transparent, visible to the entire company across all regions and seamlessly connected to our other systems and solutions. The system enhances communication with our external partners, centralizes data, simplifies our processes, and lays the foundations of best practice for product development," explains Ivica Maric, Executive Vice President Business Operations at HUGO BOSS.

"We are thrilled HUGO BOSS has selected Centric PLM and Visual Boards as a foundation in their transformative digitalization journey," says Fabrice Canonge, President of Centric Software. "We look forward to a long-term partnership."

Infosys announces Strategic Collaboration with Sally Beauty to Bring Enterprise-scale IT Efficiencies from Hyper-automation

26 September 2024

Infosys, a global leader in next-generation digital services and consulting, announced its strategic collaboration with Sally Beauty Holdings, Inc. (SBH), an American international specialty beauty retailer and distributor of professional beauty supplies. Driving enterprise-scale IT transformation, Infosys will implement best practices in IT operations to bring efficiencies through the optimization of IT service delivery.

Scott Lindblom, CIO, Sally Beauty, said "We are excited to be collaborating with Infosys as we take SBH into the future by modernizing our IT service delivery and meeting the goals set by our "Fuel for Growth" initiative. Embracing AI-amplified IT is a significant step forward for us in enabling us to, in turn, deliver exceptional experiences for our customers."

The collaboration will also help SBH standardize and simplify their IT systems and services by implementing AI-driven hyper-automation. The transformation will enable SBH to activate enhanced IT services with 24/7 predictive and proactive monitoring.

Karmesh Vaswani, EVP and Global Head of Consumer, Retail and Logistics, Infosys, said "We are delighted to partner with Sally Beauty Holdings in their journey to embrace industry leadership and excellence in customer experience. Our assembly of Infosys Topaz applied AI assets, shaped from years of our global experience in the retail and consumer goods world, will help SBH to leapfrog ahead with an AI-first enterprise stack. Our collaboration exemplifies the commitment Infosys has to empowering businesses to accelerate their AI-led transformation while amplifying customer delight and operational efficiency."

The project will consolidate numerous support services, drive process improvements and optimize costs over a five-year window.

LAN Implements Centric PLM to Enhance R&D Capabilities

3 October 2024

Centric Software® is pleased to announce that skincare brand LAN has selected Centric PLM™ to establish a unified R&D platform. Centric Software provides the most innovative enterprise solutions to plan, formulate, develop, procure, manufacture and sell consumer goods products in cosmetics & personal care, food & beverage, fashion and multi-category retail to achieve strategic and operational digital transformation goals.

Hangzhou Lanjiang Cosmetics Co., Ltd. was founded in 2018. Its brand, LAN, was one of the first brands in China to introduce pure skincare. LAN's independent R&D lab has formed long-term strategic partnerships with top 20 global cosmetics raw material suppliers and three national-level research institutions. The company was recognized as a national high-tech enterprise in 2022 and has accumulated over 30 design and R&D patents.

LAN has seen rapid growth, with its star product, Time Oil, ranking first in sales and customer satisfaction in the serum category on major e-commerce platforms for several consecutive years. Standing out in a highly competitive and homogenized domestic cosmetics industry and achieving sustainable development is challenging, and LAN decided that they needed to strengthen their R&D capabilities.

The LAN management team says, "The competitive environment for consumer product development has changed. Our current product development cycle is long, and collaboration is complex. These have been significant challenges in our past operations. This has been a key motivation for us to implement the PLM project, as we hope to preserve some of our valuable past experiences in this system and establish structured processes."

LAN chose to collaborate with Centric Software based on their industry experience and the intelligence of Centric PLM. The LAN management team is confident that Centric PLM will enable them to implement their digital transformation blueprint.

The PLM project goal is to establish a unified R&D platform to systematize and coordinate operations while standardizing product data management. Using Centric PLM, LAN aims to refine project management, clarify product goals and detail tasks from the demand stage, closely monitor project progress during product development and ensure smooth product launches.

"Centric is the most professional team globally in the field of product lifecycle management systems, and they have extensive project implementation experience," states the LAN management team. "Throughout the project, we can learn from each other and engage in deeper business-level exchanges. We also hope that this project will help us continuously optimize our business processes."

Fabrice Canonge, President of Centric Software, says, "We are honored to have earned LAN's trust. An increasing number of Chinese cosmetics companies are adopting PLM to optimize R&D

and drive further product innovation. LAN will be ahead of that curve and positioned well for long-term sustainable growth with Centric PLM as the foundation.”

Liebherr, Ansys, and CADFEM Join Forces to Implement an Enterprise Simulation Strategy and Model-Based Engineering Approach

26 September 2024

Ansys joins Liebherr in the implementation of the European manufacturer’s simulation strategy and model-based enterprise approach. Liebherr’s 35-year engagement with Ansys extends across the Ansys product portfolio, strengthening the digital thread and presenting a clear competitive advantage for Liebherr in developing products that exceed customer expectations.

Ansys simulation enables detailed virtual models that describe all physical and functional aspects of every Liebherr product. From mechanical, computational fluid dynamics, and electronics, to live simulation, acoustics, system simulation, safety analysis, and embedded software, Ansys’ multiphysics capabilities reinforce the company’s digital transformation and digital engineering initiatives through simulation process and data management (SPDM). Ansys Apex Channel Partner CADFEM Germany GmbH — which provides training, user support, and consulting services — supports all sites through a common resource-sharing strategy that reduces barriers to entry.

Liebherr-Aerospace and Transportation SAS is one of the largest Liebherr divisions with sites in Lindenberg, Germany and Toulouse, France, among others. Its product segment Aerospace has already launched a digital transformation program. The objective is to deploy an innovative model-based enterprise approach, become data/model-centric, and implement digital continuity across the entire development and product lifecycle, including efficient data exchange with customers and suppliers.

“Liebherr-Aerospace develops products consistently and completely digitally,” said Elko Van Balen and Olivier Banessy, who together lead the model-based enterprise development at Liebherr-Aerospace and Transportation. “The implementation of the model-based approach behind this confirms that the right partners have been chosen.”

“Access to Ansys software alleviates challenges related to delivering best-in-class solutions that specifically support our products and technologies in a timely manner,” said Dr. Ling Li, PLM innovation services simulation consultant at Liebherr. “We recognize that expertise is being established at all locations and that new simulation topics are being tested as well. Even our designers can run live simulations using Ansys software, which frees up our dedicated simulation engineers and reduces our reliance on external resources.”

In this project, Ansys and CADFEM are in close cooperation to jointly implement Liebherr’s state-of-the-art and fully digitalized development infrastructure.

“Another important factor is the long-standing partnership with CADFEM, through which we are optimally exploiting the potential of Ansys in many respects,” said Bertram Peer, Department Manager Simulation and Method Development Liebherr-MCCtec at the Liebherr plant in Nenzing.

“Virtual product design and development enables teams to work harmoniously across the product lifecycle to leverage critical data that leads to better products,” said Walt Hearn, senior vice president of global sales and customer excellence at Ansys. “Through instantaneous data collection and sharing, digital models can simultaneously increase design capabilities and reduce product changes during the entire development process. The ability to transform business processes and applications to improve the customer experience makes the simulation software of Ansys integral to the digital transformation strategy.”

Lumen and Qualtrics Build New Customer Insights Platform to Boost Customer Service and Satisfaction

1 October 2024

Qualtrics, the leader and creator of the experience management (XM) category, expanded on its partnership with Lumen, a global enterprise technology platform and telecommunications company, to redesign Lumen’s customer and employee experience programs and improve the service it provides to customers.

Powered by Qualtrics XM® for Customer Experience suite and Qualtrics AI, the new Lumen real-time customer insights platform combines feedback from more than two dozen sources, including customer interactions, service performance, and market-specific trends in unstructured feedback like social media or call center transcripts.

These real-time insights into customer and employee experience performance allow Lumen to tailor its communication with every customer based on their specific needs and recent experiences. For example, call-center agents assisting a customer can see a Customer Health Score that fluctuates daily based on real-time operational inputs. The added insights enable agents to communicate with greater relevance, as well as empathy.

As a result of its partnership with Qualtrics, Lumen achieved a 17-point year-over-year increase in NPS, indicating substantial gains in customer satisfaction and loyalty.

“Real-time data signals mean that our people can meet the moment and engage customers with empathy,” said Kristina Nissen, Senior Vice President, Strategic Pursuits and Mid-Market at Lumen Technologies. “Our new customer health scores powered by Qualtrics provide our people with a more comprehensive understanding of how to help each customer as an individual and which actions they can take to make the biggest impact on their experience.”

Contextual insights fuel smarter communications

Over a decade of research by the Qualtrics XM Institute demonstrates that how customers feel about an experience has the most significant impact on their future loyalty behaviors compared to other factors. Thanks to its longstanding partnership with Qualtrics, Lumen already had a wealth of experiential data showing how customers felt about their interactions with the company. But that data was missing operational context; for example, Lumen couldn’t tell whether an unhappy customer was offering feedback right after a technician missed a service appointment.

Lumen tapped into Qualtrics AI and natural language processing capabilities to build a comprehensive real-time customer insights platform that combines data from dozens of sources, including unstructured, unsolicited feedback that already exists in places like online forums, review sites, social media platforms, and chat or phone conversations as well as operational metrics like on time service delivery. That fusion of experiential and operational data enables better understanding of the types of Lumen experiences that have the largest impact on customer satisfaction and loyalty.

“Unstructured data represents close to 90% of the data generated today and Qualtrics AI enables organizations to extract rich information that paints a comprehensive view of customers’ experiences and pain points,” said Manisha Powar, Chief Product Officer of Qualtrics XM for Customer Experience. “Armed with this information, organizations can identify and prioritize the improvements that will have the most significant effect on customers’ emotions – boosting loyalty and profits.”

Employee recognition feeds business outcomes

Lumen also used Qualtrics to establish a powerful link between Employee Experience (EX) and customer outcomes. With insights from Qualtrics XM for Customer Experience, Lumen found that when their frontline service technicians feel recognized for delivering excellent customer service, they are nine times more likely to resolve customer issues in a single visit.

Based on that insight, Lumen leaders stepped up the company’s promotion and recognition of great customer service within the company’s field organization. That’s led to savings on operational costs and time, as well as a more loyal and engaged workforce.

“You cannot drive exceptional customer experience, without unlocking the employee experience,” said Nissen. “For us, focusing on both experiences and empowering our employees is unlocking growth, profitability and increased customer loyalty.”

Tai Apparel Brings Efficiency to Teams around the Globe and Supports Growth with Centric PLM

27 September 2024

Centric Software®, the Product Lifecycle Management (PLM) market leader, is pleased to announce that Tai Apparel, a full-service apparel design studio, has selected Centric PLM™ to speed time to market. Centric Software provides the most innovative enterprise solutions to plan, design, develop, source, price and sell products such as fashion, apparel, home décor, footwear, sporting goods, furniture, consumer electronics, cosmetics, food & beverage and luxury to achieve strategic and operational digital transformation goals.

Tai Apparel is a Minneapolis-based, full-service apparel design studio specializing in juniors, women’s, men’s, children’s and pet products. Their supply chain is global, manufacturing for many categories including mass, mid-tier, specialty and department stores including retailers such as Target, Macy’s, Kohl’s, Walmart, Carter’s, PetSmart and T.J.Maxx.

Linda Choi, VP of Operations says, “Our company grew organically, with a small team based in Minneapolis to an international company with virtual team members all over the US, and offices in Guatemala and China.”

Choi describes the circumstances that led to the search for PLM. “In the beginning, multiple spreadsheets and documents were used to house product information. As the team expanded, we needed help to organize and move into a digital space. There was too much duplication of work, misinformation or multiple meetings to check and double-check the work.” Tai is a design house that has a deep partnership with factories. Choi explains, “We’re trying to cut down our timelines to be as quick as possible so we can go to these big retailers and offer them the latest and greatest fashion with a shorter lead time. A PLM tool was the next stepping-stone to the continued growth of Tai Apparel.”

Finding the right PLM platform and partner was not an easy task. Choi says, “When I learned about Centric’s small-to-medium business SaaS option, that was a total game changer. There’s a shorter implementation time with a smaller group of cross functional team members where it really counts—for us, we pulled from the design, the development and technical design teams. The SaaS option gives us the opportunity to get Centric PLM in now but also to move up to Centric for larger enterprises when we’re ready. That was one of the biggest selling points.”

Choi remarks, “We are looking forward to better speed-to-market and having all product information in one place. Everybody will be looking at the same up-to-date information. We expect improved efficiency, data accuracy and will definitely benefit from shared knowledge.”

PLM will also assist with sustainability. Says Choi, “We’re working on a science-based initiative to commit to reduce greenhouse emissions by a certain amount. Our partners are committed. We require tools like Centric PLM to be able to say, ‘How much cotton do I use? What percentage is polyester or recycled polyester? Am I using a woven label instead of a heat seal label?’ You need that information. PLM is critical to pulling in that data easily.”

“During the demos and the vetting process, Centric’s knowledge of the product was one differentiator vs. the other vendors,” says Choi. “I really felt like whoever we were interfacing with on the Centric side, had a deep understanding of the product. And if, let’s say, we potentially had some question, there is always a Centric person to help us to share that information to whomever needs it internally. I feel like it is a good partnership. Centric is really easy to work with.”

CEO of Centric Software, Chris Groves says, “Tai Apparel is a great example of a business accelerating their growth with Centric PLM. Having a single source of truth for Tai’s global teams is sure to streamline their workflows and provide the tools to continue to provide excellent service to their impressive roster of customers.”

The S Group Evolves from Backbone PLM to Bamboo Rose for Advanced Retail Management Capabilities

3 October 2024

Bamboo Rose is excited to announce that The S Group, a leading global fashion and apparel manufacturer serving premium brands, will be transitioning from Backbone PLM to the Bamboo Rose Retail Management Platform. This move follows Bamboo Rose's acquisition of Backbone PLM and marks a pivotal enhancement in The S Group's operational efficiency and growth strategy.

While Backbone PLM significantly enhanced product development and tech pack creation for The S Group, the demand for greater scalability and advanced functionalities such as managing timelines, line plans, and in-depth costing capabilities prompted the exploration of Bamboo Rose's comprehensive solutions.

With Bamboo Rose, The S Group is poised to boost operational efficiency, streamline timeline management, and meet every development deadline, ensuring timely product delivery. The advanced features of Bamboo Rose will support global growth and customer onboarding, without necessitating team expansion. Enhanced reporting capabilities will offer improved visibility and control over operations, facilitating more strategic decision-making.

"We have some of the world's leading athletic brands knocking on our doors, and our collaboration with Bamboo Rose is laying the foundation for us to scale efficiently, onboard new customers, and accelerate the value we deliver. The continuous evolution of their platform, driven by both internal innovation and strategic acquisitions—like Foresight Retail's planning suite—reinforces our confidence that we've chosen the right partner to help us empower our customers' success," said Elizabeth Rogers, President and COO at The S Group.

"Our acquisition of Backbone PLM last year accelerated ongoing investments into our platform that are designed to address the constantly evolving product development-related needs for all Bamboo Rose customers," said Matt Stevens, CEO. "The S Group partnership exemplifies our commitment to providing advanced solutions for vendor collaboration, detailed reporting, and enhanced project management and we're deeply humbled to play a role in their exciting success journey."

The S Group's evolution with Bamboo Rose underscores the technology giant's strength in serving the specific needs of brands and retailers as they grow into large enterprise organizations over time. Bamboo Rose is a trusted partner for today and tomorrow, committed to empowering ongoing success in the fashion and apparel industry.

Yamamay Teams Up with Centric Software to Strengthen Sustainability and Power Innovation

2 October 2024

Centric Software® is pleased to announce that Yamamay has selected Centric PLM™ to streamline company-wide collaboration and further empower eco-friendly operations. Centric

Software provides the most innovative enterprise solutions to plan, design, develop, source, buy, make, price, allocate, sell and replenish products such as fashion, outdoor, luxury, multi-category retail, grocery, food & beverage, cosmetics & personal care and consumer electronics to achieve strategic and operational digital transformation goals.

Founded in 2001 and headquartered in Gallarate (Milan area – Italy), Yamamay is a leader in the production and distribution of underwear, lingerie, sleepwear and beachwear, operating an e-commerce site and 600+ physical monobrand stores across 30 countries. Since its establishment, Yamamay has placed sustainability at the epicenter of its company values, acting as a trailblazer in the Italian market through the implementation of various climate-conscious practices, including running the first donation campaign in Italy for the Amazon rainforest and launching the M.A.R.E project in 2022 to monitor sea pollution. Aside from sustainability, Yamamay bases every business decision on its three additional pillars: beauty, innovation and quality with the aim of delighting its customers and fostering long-lasting growth.

To keep pace with rapid trend cycles, meet growing consumer demands for transparency and stay ahead of rapidly evolving European regulations, Yamamay requires a robust platform to strengthen and optimize its operations. Barbara Cimmino, Head of Corporate Social Responsibility and Innovation at Yamamay, explains one of the company's many motives for selecting Centric PLM:

“It’s important for our customers that we are transparent and consistent. That’s why PLM is critical for us to ensure that our data is visible, accurate and error-free across the board. We are often asked where our products are produced, so having that information available in real-time will help us pursue traceability initiatives like Digital Product Passports and ensure we can achieve our green claim.”

Since the very beginning, Yamamay has worked closely with its suppliers across the globe—including partners in Sri Lanka, Vietnam, China and Bangladesh—to source and produce all of its products. Achieving seamless communication and safeguarding the quality of data exchanged with its partners is fundamental to the Italian brand's strategy to ensure cost control, enhance traceability and accelerate time to market.

“When you’re precise in informing your suppliers on the materials, components and workmanship you want, you don’t need to rework or take on unexpected costs. That’s where PLM comes in,” says Cimmino.

After relying on a legacy system since 2008, the Yamamay team was well-equipped to identify the ideal next-generation PLM technology. Centric Software's solution stood out as the top choice due to its advanced AI-driven functionality, extensive network of leading sustainability vendors and forward-thinking vision for the fashion and apparel industry.

“Knowing that Centric was working with the same sustainability vendors that we wanted to partner with was a confirmation that we were aligned,” notes Cimmino. *“Centric has a long-term vision and advanced roadmap, while other PLM providers are still only focused on the now,”* she adds.

Yamamay is anticipating game-changing benefits thanks to the implementation of Centric PLM. With streamlined communication and collaboration and improved information management, the Italian brand will profit from having a single source of truth, empowering teams to propel innovation and sustainability plans in parallel.

“In Europe it is clear retailers can only compete at a global level if we prioritize innovation and the needs of our customers,” concludes Cimmino. “This collaborative solution will make everything more efficient, drive long term success and accelerate our digitalization journey.”

“We are delighted to launch this next phase of digital transformation with Yamamay, to empower them to achieve their sustainability goals and fuel their overall business growth and innovation,” says Fabrice Canonge, President at Centric Software. “Centric PLM is specifically tailored for the needs of the fashion and retail industry, and we’re excited to see Yamamay’s continued global success with our technology at its core.”

Product News

Centric Software Pioneers Fully Actionable Digital Whiteboard with Seamless PLM Integration to Optimize Product Assortments

30 September 2024

Centric Software® is pleased to announce the release of Centric Visual Whiteboard™, the latest addition to the Centric Visual Boards™ family of connected digital boards already with actionable content adopted by many leading brands and retailers worldwide. Centric Software provides the most innovative enterprise solutions to plan, design, develop, source, buy, make, price, allocate, sell and replenish products such as fashion, luxury, footwear, outdoor, home and related goods like cosmetics & personal care as well as multi-category retail to achieve strategic and operational digital transformation goals.

Retail and grocery brands are shifting from the endless aisle concept to SKU prioritization that better meets consumer demands and has a positive financial impact. However, developing robust assortments is challenging, as marketing, product, design, merchandising and planning teams struggle with disconnected tools and systems. Teams frequently lose weeks manually pulling data from various sources to create cohesive presentations for seasonal collections and assortments. Information is often static; immediately out of date as soon as it is copied/pasted from one system to another and, critically, teams lack the ability to visually pivot collections based on various criteria such as delivery date, theme, price point, channel, region, color, size, etc. to ensure a robust, curated product offer.

Centric Visual Whiteboard is a dynamic, collaborative workspace that empowers marketing, designers, merchandisers and planners to visualize concepts and transition smoothly from ideation to production. This intuitive platform supports various use cases, from assembling seasonal assortments to preparing detailed linesheets and presentations.

Users of Centric Visual Whiteboard believe that it is a game-changing solution and report 99% time saving, equating to weeks or months, to produce outputs required by stakeholders for

business-critical decisions. One European brand estimated annual savings of €800k in resources for inspiration board updates. “Creating a collection information presentation used to take a team of 5 to 10 Product Managers a full week, but now it can be done in two minutes,” says a high-end fashion jewelry brand.

“Centric Visual Whiteboard can be configured to the customer’s specific needs and its function depending on who is using it”, explains Humberto Roa, Vice President of Innovation at Centric Software.

“Centric Visual Whiteboard is a free-form or templated canvas where users can bring together real-time imagery and information related to products, styles, materials and associated attributes from multiple systems, and automatically group them in different ways, such as by price point or color or size or product family.... For designers or marketers, this might mean creating a concept brief or seasonal promotions. Through a merchandising lens, it could be creating visual line planning reports or developing a creative brief with product placeholders. Boards created using Centric Visual Whiteboard can be exported as slide decks to tools such as PowerPoint, quickly transforming collaborative sandboxing into presentations for internal or external stakeholders.”

Additional market feedback includes, “We bring in imagery and data points from PLM and ERP, adapt the layout for the specific audience, automatically group and sort products and download the canvas in seconds as a presentation or PDF. We save so much administrative time updating slides, as price and margin changes are automatically updated from our ERP solution. It’s an optimal collection visualization system for faster decision-making.”

“Centric Visual Whiteboard was developed hand-in-hand with our leading fashion, grocery and consumer goods brand and retail customers,” says Chris Groves, CEO of Centric Software.

“Centric Visual Whiteboard solves multiple problems and is an innovative development for fashion, retail and consumer goods teams to drive better and faster decisions, resulting in both happier customers and improvements in financial performance.”

EON Reality Unveils Virtual Laboratories with Realistic Physics Simulations

3 October 2024

EON Reality, the world leader in AI-assisted Virtual Reality and Augmented Reality-based knowledge transfer for industry and education, is thrilled to announce the launch of **Virtual Laboratories with Realistic Physics Simulations**. This cutting-edge feature allows students to conduct experiments in a safe, immersive virtual environment, enhancing understanding and engagement in science education.

Advancing STEM Learning

The Virtual Laboratories provide accurate physics and chemistry simulations, enabling students to explore complex concepts interactively. By removing the limitations of physical labs, such as safety risks and equipment availability, EON Reality empowers educators to deliver comprehensive science education.

“Hands-on experience is vital for mastering scientific principles,” said Dan Lejaskar, Chairman at EON Reality. *“Our Virtual Laboratories offer an accessible and engaging platform for students to experiment and discover.”*

Key Features:

- **Realistic Simulations:** High-fidelity models replicate real-world physics and chemical reactions.
- **Wide Range of Experiments:** Covers topics across physics, chemistry, and biology curricula.
- **Interactive Environment:** Students can manipulate variables and observe outcomes in real-time.
- **Safety and Accessibility:** Eliminates risks associated with physical experiments, making advanced labs accessible to all students.

Benefits:

- **Enhanced Understanding:** Visual and interactive elements help students grasp complex concepts.
- **Increased Engagement:** Interactive simulations increase student interest and motivation.
- **Cost-Effective:** Reduces the need for expensive lab equipment and consumables.
- **Scalability:** Suitable for individual learning and large classroom settings.

Availability

Virtual Laboratories with Realistic Physics Simulations are now available on the EON-XR platform. Educational institutions can integrate these labs into their science programs immediately.

EPLAN Data Portal Update September 2024

1 October 2024

507 manufacturers and more than 1,860,000 data sets are available with the latest updates in August and September 2024.

New manufacturer catalogs

- Chenguang Cable – 10,656 new data sets with cables
- EISELE GmbH – 1,760 new data sets with fluid, connection splicers / line connectors
- EcoG – 1 new data set with PLC
- Hoshimoto Co., Ltd. – 10 new data sets with generals, lock systems and miscellaneous
- Mibu Denki Industrial Co., Ltd. – 12 new data sets with lights and terminals
- Ouneva Group – 109 new data sets with terminals

- People Electric Appliance Co., Ltd. – 10,097 new data sets with cables
- Shanghai UPUN Electric (Group) Co., Ltd. – 236 new data sets with terminals
- Suzhou cableplus Technologies Co.,Ltd. – 151 new data sets with cables

Updates and new data

- 3M Company – 22 updated data sets with converters
- ABB LTD – 5 new data sets with converters
- ACREL Co., Ltd. – 82 updated data sets with measuring instruments
- Balluff GmbH – 30 new and 5 updated data set with cables, PLC, plugs and sensors, switches and pushbuttons
- Banner Engineering Corporation – 95 new and 10 updated data sets with sensors, switches and pushbuttons and signal devices
- Baumer MDS GmbH – 83 new data set with sensors, switches and pushbuttons
- Block Transformatoren – Elektronik GmbH – 44 new data sets with transformers
- Zhejiang CHINT Electrics Co., Ltd. – 1 updated data set with protection devices
- Danfoss Drives A/S – 67 new and 19 updated data sets with converters
- Dehn + Söhne GmbH & Co. KG – 34 new data sets with protection devices
- Delta Electronics, Inc. – 13 new data sets with signal devices
- Eaton Industries GmbH – 117 new and 137 updated data sets with contactors, converters, protection devices and relays
- Euchner GmbH + Co. KG – 3 new data sets with sensors, switches and pushbuttons
- Festo SE & Co. KG – 153 new and 3 updated data sets with actuators, amplifiers, cables, controllers, cylinders, PLC, plugs, sensors, sub-plates and valves
- Finder CZ, s.r.o. – 224 new and 1,175 updated data sets with PLC, sensors, switches and pushbuttons
- FRABA GmbH – 13,296 new data sets with sensors
- HARTING Electric GmbH & Co. KG – 74 updated data sets with sensors, switches and pushbuttons and signal devices
- ifm electronic gmbh – 42 new and 146 updated data sets with cables, contactors, general, electrical engineering - special items, lights, miscellaneous, PLC, relays, rectifier, sensors, switches and pushbuttons and transmission paths
- ILME GmbH (I.L.M.E. SPA) – 16 new and 345 updated data sets with plugs
- Jacob GmbH – 444 updated data sets with housing accessories external extensions
- JingQi (Tianjin) technology Co., Ltd. – 230 new data sets with connection splicer / line connectors

- J. Schmalz GmbH – 56 new data sets with valves
 KALEJA GmbH – 5 updated data sets with amplifiers and controllers
- KEYENCE CORPORATION – 8 new data sets with sensors, switches and pushbuttons
- Lapp Kabel GmbH – 46 new data sets with plugs
- Leuze electronic GmbH Co. KG – 34 new and 4 updated data sets with sensors, switches and pushbuttons
- LOVATO SPA – 5 new and 37 updated data sets with protection devices, sensors, switches and pushbuttons and signal devices
- LS Electric – 28 new and 28 updated data sets with converters, PLC and signal devices
- Mitsubishi Electric - 88 new and 7 updated data sets with protection devices
- NanJing Solidot Electronic Technology - 39 new and 25 updated data sets with PLC
 Omron Europe B.V. – 127 new and 3 updated data set with amplifiers, controllers, contactors, general, measuring instruments, test devices, PLC, relays, sensors, switches and pushbuttons, voltage sources and generators
 Panduit – 2,997 new data sets with busbars, cables, cable ducts, connection splicer / line connector, connections, couplings, enclosure, general, housing accessories internal extension, housing, housing accessories external extension, logic items, lock systems, miscellaneous, motors, plugs, routing accessories, terminals, 19-inch module technology
- Pepperl + Fuchs AG – 47 new and 2 updated data sets with sensors, switches and pushbuttons
 Pilz GmbH & Co. KG – 1 new and 20 updated data sets with cables, PLC and plugs
 PHOENIX CONTACT GmbH & Co. KG - 546 new and 1.063 updated data sets with busbars, cables, converters, contactors, field distribution devices, plugs, relays, terminals, transmission paths
- Rittal GmbH & Co. KG – 102 new and 266 updated data sets with enclosures, housings, housing accessories external extensions, housing accessories internal extensions and lock systems
- Rockwell Automation – 1,140 new and 187 updated data sets with cables, contactors, converters, motors, PLC, relays, sensors, switches and pushbuttons
- Rockwell Automation (NFPA Data) – 1,140 new and 187 updated data sets with cables, contactors, converters, motors, PLC, relays, sensors, switches and pushbuttons
- K. A. Schmersal GmbH & Co. KG – 7 new data sets with sensors, switches and pushbuttons
- Schneider Electric SA – 16 new and 127 updated data sets with protection devices
- SEW-EURODRIVE GmbH & Co. KG – 189 new and 390 updated data sets with converters
- Schaffner EMV AG – 4 new data sets with filters and terminators

- Shanghai AUSSEN&GEMPLE Technology Co., Ltd. – 5,545 new data sets with sensors, switches and pushbuttons
Shanghai GKONCY Electrics Co., Ltd. – 200 new data sets with terminals
SICK AG – 48 new data sets with sensors, switches and pushbuttons
- Siemens AG – 323 new and 286 updated data sets with cables, contactors, converters, filters, electrical engineering - special items, PLC, plugs, protection devices, relays, voltage source and generators
- Suzhou Inovance Technology Co., Ltd. – 8 new data sets with amplifiers and controllers
- TELE Haase Steuergeräte GmbH – 2 new and 123 updated data sets with relays, contactors, electrically-operated mechanical devices and transformers
- Wago GmbH & Co. KG – 1 new and 102 updated data sets with PLC and terminals
- Weidmueller Group – 53 new and 288 updated data sets with accessories, cable ducts, converters, plugs and terminals
- Wuxi Xinje Electric Co., Ltd. – 224 new and 47 updated data sets with amplifiers, cables, controllers, general and motors
- Wöhrle Stromversorgungssysteme GmbH – 15 new data sets with voltage source and generators

Summary

- 9 new manufacturer
- 52 updated manufacturer
- 50,227 new data sets
- 5,466 updated data sets
- 4,383 deleted data sets
- 48,863 new parts with EDS
- In total 1,279,143 parts with EDS
- In total 359 manufacturers with EDS parts
- In total 1,864,631 data sets live in EDP

Everything you need to know about Solid Edge 2025, launching October 23

2 October 2024

On October 2, 2024 Kyzmen Wood published a blog post on the Siemens blog to announce the upcoming update to Solid Edge. Kyzmen also announced there will be an online launch event taking place on YouTube Live. Kyzmen says, “The upcoming Solid Edge 2025 release is set to redefine the product design experience with a variety of new features and enhancements that make it possible to innovate without limits, from new design features to seamless integrations with other products across the Siemens Xcelerator portfolio. This release will also introduce the

ability to securely access advanced Solid Edge functionality and powerful add-on capabilities on the cloud, and so much more.”

Read the full blog post here: <https://blogs.sw.siemens.com/solidedge/solid-edge-2025-launching-info/>

Graphisoft announces next phase of its shift to future-proof subscription model

30 September 2024

Graphisoft, the leading Building Information Modeling (BIM) software solution developer for architecture and multidisciplinary design, today announced that, as it progresses with its strategic shift to a sustainable subscription software delivery model, updated conversion terms will be available to its Software Service Agreement (SSA) / Forward (FWD) customers starting in 2025, with SSA/FWD contracts serviced through the end of 2026.

As announced earlier this year, Archicad perpetual and SSA/FWD licenses will be available for purchase by new customers through December 31, 2024. Existing customers holding Archicad perpetual license(s) can purchase additional Archicad perpetual and SSA/FWD licenses and upgrade earlier versions of Archicad through December 31, 2025. Users can renew SSA/Forward contracts through the end of 2025, and Graphisoft will continue to service active SSA/Forward contracts through the end of 2026.

Starting in 2026, Archicad will be available for purchase only through subscription. Archicad SSA/FWD customers can convert to Archicad Collaborate subscriptions at the same price as SSA/FWD in 2024. Starting in 2025, SSA/FWD customers can convert to Archicad Studio subscriptions at the same price as SSA/FWD. This offer was designed to help SSA/FWD customers take full advantage of Graphisoft’s subscription offerings at a very preferential starting price. Early movers in 2024 are getting the added benefits of cloud collaboration included by default.

“Technology in the AEC industry is evolving at lightning speed,” reiterated Daniel Csillag, Graphisoft CEO. *“Shifting our product delivery model fully to subscription allows users to take advantage of agile, responsive, and up-to-date software solutions — as soon as they hit the market,”* he added. *“We are confident that our conversion program — taking into account our customers’ long-term needs — will attract all our customers to join us on this exciting journey!”*

Graphisoft introduces 2024 product lineup

2 October 2024

Graphisoft, the leading developer of Building Information Modeling (BIM) software solutions for architecture and multidisciplinary design, announced its latest product lineup, including significant feature updates to Archicad, BIMcloud, BIMx, and DDScad. The newest version helps architects and engineers design sustainable and better-performing buildings, work seamlessly across disciplines, and build momentum in growing their businesses.

The latest updates follow a robust **Technology Preview Program**, where Graphisoft invited users to test and weigh in on the evolution of Archicad. *“Two years ago, we launched our public*

roadmap. Since then, we've consistently delivered on key features, refined the roadmap based on user feedback and industry trends, and strengthened our technology partnerships to enhance the user experience," said Márton Kiss, Chief Product Officer at Graphisoft.

New technology partnerships strengthen OPEN BIM

Earlier this year, Graphisoft partnered with **BIMmTool** to enhance **Scan-to-BIM** and **point cloud workflows**, making renovation and reuse projects even smoother in Archicad. In addition, Graphisoft's deep integration with **Chaos Group's Enscape** solution delivers workflows for real-time visualization on both macOS and Windows, with seamless integration between Archicad and Enscape. In the area of parametric design, Graphisoft has a lengthy history with **McNeel's Rhino Grasshopper solution**, where Graphisoft has released updated workflows. Finally, within the **Nemetschek Group**, Graphisoft offers a powerful set of tools that are tightly integrated to support everyday design and construction projects — like **Solibri Inside** for design checking and the **Bluebeam Connection** for PDF-based collaboration.

Archicad

Archicad's powerful built-in tools and user-friendly interface make it the most efficient and intuitive BIM software on the market. Featuring out-of-the-box design documentation, one-click publishing, photo-realistic rendering, and best-in-class analysis, Archicad lets architects focus on what they do best: design great buildings.

"Archicad is at the heart of Cottee Parker's ability to take on complex, large-scale projects, allowing us to challenge, lead, and innovate with the assurance that our systems can deliver our design vision," said Dan Potts, Design Director at Cottee Parker Architects.

Keynotes are new to Archicad in this version. They boost the documentation workflow with an automated, database-driven documentation and annotating system that integrates specifications and legends. This integrated solution eliminates the need for workarounds when consistent annotations are needed across the entire documentation set.

The improved **Rhino-Grasshopper-Archicad Connection** supercharges the parametric design workflow and evaluates design variations faster with a built-in hotlink module and extended beam and column support.

Archicad AI Visualizer is now based in the cloud, providing instant access without the need for desktop installation and with far quicker rendering times.

Architects can make better-informed decisions and design more sustainably thanks to a robust and growing ecosystem of Lifecycle Assessment tools by **One Click LCA** and Archicad solutions.

With the improved **Point Cloud** capabilities in **BIMmTool**, refurbishment and renovation projects are more effortless. Architects can manage large data sets faster to optimize their workflow.

BIMcloud

With BIMcloud, users get secure, real-time collaboration between project team members, regardless of the size of the design project, the location of the offices, or the internet connection speed. Private and public cloud configurations on standard hardware and Software

as a Service (SaaS) allow even smaller offices to take advantage of fast, efficient, and secure access to shared projects in real-time.

A solid platform for multidisciplinary design collaboration, BIMcloud is the tool architects and engineers can count on. Users will experience accessible, secure collaboration supported by market-leading global cloud platform providers with BIMcloud.

BIMx

BIMx is an award-winning collaboration and presentation powerhouse that offers an immersive user experience across platforms and devices. It's far more than a great 3D viewer—it's a productive workplace and mobile collaboration solution.

New in BIMx is **Anti-aliasing in 3D**, which enhances the visualization of 3D models with smoother and more refined edges, elevating the overall quality of designs. Greater interactivity of BIMx's 3D models improves client communications — show or hide elements one by one or by group and control their visibility easily. Users can streamline the design review process with an easy, in-context switch to another 3D model — like Design Option, Renovation, and Structure Display. And BIMx supports **Apple Vision Pro**, offering an immersive 3D experience that revolutionizes stakeholders' engagement with a project.

Archicad Collaborate

Archicad Collaborate offers superior value with intuitive 3D design, OPEN BIM collaboration, and quality documentation, boosted with powerful capabilities for collaboration, cloud safety, and immersive presentations. *"With the most advanced tools available at a predictable cost, our subscribers can grow their business **and** their competitive advantage — even during challenging economic times,"* Kiss said.

DDScad

Available in select markets in the Graphisoft Store, DDScad combines great architecture with peak building performance thanks to intelligent Mechanical, Electrical, and Plumbing (MEP) design tools, integrated calculations, and comprehensive documentation solutions for all building systems. Users can design and deliver high-quality MEP projects on time and within budget while collaborating seamlessly with BIM project stakeholders.

Powered by enhanced collaboration options in the latest version of DDScad, engineers can design sustainable building systems using workflows tailored for MEP experts. DDScad's enhanced **photovoltaic system design options** empower electrical engineers to create a cleaner, greener future. The updated **DIALux evo-DDScad Electrical connection** allows engineers to design state-of-the-art lighting systems. In addition, electrical engineers can level up their designs by modeling innovative, easy-to-plan, and flexible **busbar trunking systems**.

"DDScad 20 offers a range of high-quality functions for MEP design and a high level of stability," said Thomas Seitz, Team Leader of Technical Building Services at Ingenieurbüro Herzog & Partner in Germany. *"But the real highlight for me is the OPEN BIM optimized project mode, which we are already actively using for our planning. This opens up a whole new world for MEP designers, which has already taught us a lot – for example, what we need to pay attention to when exchanging data with cooperating architects."*

Archicad-DDScad electrical workflow improvements

A seamless solution allows architects and electrical engineers to exchange models effortlessly, resulting in fewer errors and streamlined workflows.

Infor Targets Business Velocity with Added Process Mining, ESG and GenAI Capabilities

1 October 2024

Infor, the industry cloud complete company, announced significant platform technology updates to its industry-specific CloudSuite portfolio on Day One of the company's 2024 Infor Velocity Summit. Each new innovation, including a GenAI Assistant, process mining capabilities, and ESG Strategy Management, meaningfully enhances Infor's suite of industry-specific products built to drive value. Infor developed its multi-tenant CloudSuite tech stacks with out-of-the-box hyper-specific capabilities, redesigning the way organizations work and helping to reduce risk. To further drive value, Infor offers industry specific automations, leveraging AI and machine learning, which are pre-configured solutions that customers can easily deploy without disruption to core systems.

"I am excited about the immense value these solutions will drive for our customers," says Soma Somasundaram, President and CTO of Infor. "Infor's deep industry expertise is showcased through thousands of best-practice, micro-vertical processes built into the product. With each release, we increase the volume of pre-built experiences that harness the power of transformative technologies. For example, with embedded process mining capabilities, customers can quickly examine process efficiencies, optimize, and automate with minimal disruption to business operations."

Key updates of Infor's October release include:

Turning conversations into business clarity with new GenAI Assistant and additional embedded experiences.

To help customers unleash hyper-productivity in their flow of work, Infor GenAI Assistant enhances the user experience of Infor CloudSuites and is limited availability in October. This conversational assistance offers a more dynamic, intuitive, and actionable approach to interacting with industry-centric data, addressing time-consuming tasks such as managing manufacturing projects, analyzing requisitions, and tracking products.

Infor GenAI Assistant is part of Infor's Industry AI portfolio, that also includes Infor GenAI. GenAI continues to be embedded deeply in the flow of industry-specific processes, enriching applications one experience at a time.

"With the assistance of Infor GenAI, we have significantly accelerated our project with greater accuracy and consistency. The initial plan to cleanse our item master data would have taken several years with a two-person team manually grouping and updating over 800,000 items," said Elisabetta Venezia, Group Director, ERP System & Data Management, GMM Pfaulder. "We now expect to complete the project within the next six months. By eliminating duplicates with a

cleaner database, we anticipate at least a 5% reduction in inventory costs, which translates to \$1-2M Euro in savings.”

Providing enhanced, accelerated visibility into business processes with Infor Process Mining.

Users quickly gain streamlined data definition, simplified export-import capabilities, efficient data loading, accelerated insights retrieval, and comprehensive insights analysis—all within a simply, easy-to-use, unified platform that enhances operational agility and decision-making effectiveness.

“This transformative tool [process mining] provides visibility into business process events within our daily order-to-cash operations, highlighting areas for improvement and actionable opportunities,” says Steve Turner, Director of Information Systems for Oberg Industries. “We anticipate by addressing these process inefficiencies and bottlenecks we will be able to increase our business throughput with existing resources over time.”

Helping customers stay on top of new compliance regulations with new modules for ESG Strategy Management and Execution.

Infor announces new capabilities that allow organizations to develop a systematic approach to set, meet, and report on their organizational ESG goals. With this release, Infor is embedding ESG data and process improvements into day-to-day workflows for continuous improvement.

Industry-specific supply chain management enhancements help improve supply chain accuracy, reduce manual intervention, and speed time to value.

Using AI and embedding purpose-built capabilities within Infor CloudSuites, we unlock and unify data, which can reduce manual intervention, and accelerate time to value. For example, Infor is the first and only healthcare ERP provider to embed procedure supply planning and distribution management capabilities.

Launch of SimOps: A New Era in Simulation Operations Automation

27 September 2024

SimOps announces the official launch of its **Simulation Operations Automation** initiative, a groundbreaking category poised to redefine the way organizations manage and optimize their engineering simulations and the operation of the underlying infrastructures.

As high-performance computing (HPC) becomes central to innovation across various industries and applications, SimOps provides a comprehensive framework designed to streamline simulation processes, enhance operational efficiency, and align technical workflows with strategic business goals.

The Need for SimOps

Engineering simulations are critical to industries such as manufacturing, energy, healthcare, and beyond, but managing the infrastructures—whether on premises or in the cloud—can be complex and costly. The SimOps Framework addresses these challenges by integrating technology, people, and processes into a unified model, simplifying the management of HPC environments, driving more effective use of resources, and fostering the effective collaboration of engineering and IT.

SimOps Training and Certification

As part of the SimOps launch, we are introducing a structured educational pathway to equip professionals with the skills needed to master simulation operations. It starts with the **SimOps Fundamentals Training** which covers key concepts, tools, and methodologies for effectively managing simulation infrastructures. Following this, participants will have the opportunity to pursue advanced certifications in areas like HPC resource management and cloud-based simulation operations automation.

SimOps certifications will become an industry-recognized training and career path, providing individuals with valuable credentials to enhance their expertise and thus contribute to their organization's success. Certified professionals will also gain access to a community of SimOps practitioners, offering ongoing learning and collaboration opportunities.

Looking Ahead

SimOps is more than just a framework—it represents a community of innovators dedicated to advancing simulation operations. As industries adopt this new approach, the SimOps community will continue to expand, sharing best practices, fostering collaboration, and driving advancements in simulation technology.

Matterport Fall 2024 Release: 'Insights Meets Imagination' Elevates the Platform With Generative AI and More

1 October 2024

Matterport, Inc., unveiled a groundbreaking suite of new tools designed to reshape the way professionals design, build, and market properties.

Through the power of generative AI, Matterport users can now easily reimagine the potential of any space, transforming digital twins from static replicas into dynamic canvases for creativity.

“Our Fall 2024 Release empowers users to unlock the full potential of Matterport,” said RJ Pittman, Chairman and CEO of Matterport. “Imagine being able to defurnish a home with one click or generate stunning property descriptions automatically, using just the data from your digital twin. These tools save time, elevate listings, and simplify complex workflows for everyone—from real estate agents to contractors and enterprise teams. And with features like 3D model merge, field tags, and one-click bill-back processing, we’re helping customers manage spaces at scale with unprecedented speed, efficiency and precision.”

New tools for agents:

One of the most revolutionary additions in the Fall Release is Matterport’s AI-powered **defurnish tool**, designed to solve a common challenge for home sellers and agents: clutter. With a single click, users can now transform a cluttered living room or messy garage into a clean, open space—allowing potential buyers to visualize the home’s true potential. Whether it’s “erasing” an outdated couch or clearing out the dining room set, defurnish gives agents a powerful yet simple tool to make every property shine.

Matterport’s new defurnish tool uses AI to remove furniture and other objects from virtual property listings.

And coming soon, Matterport's interior design tools will unlock creativity for everyone—letting users digitally furnish and redesign spaces with ease and offering a glimpse of what the future could hold.

The AI-powered **property description tool** is another game-changer, crafting detailed, engaging written descriptions in just seconds. Brokers and marketers can select the style and tone, ensuring each listing is perfectly tailored—whether it's a sleek, modern downtown loft or a charming suburban home. And by leveraging the precise spatial data of every digital twin, the tool creates content that is not only beautifully written but also accurate down to the last detail, saving hours of work and producing results that even seasoned experts will admire.

New tools for property managers, contractors, and designers:

For large-scale projects, Matterport's new **Merge tool** enables users to seamlessly “snap” together multiple digital twins. Imagine creating a full digital model of an entire hotel, floor by floor, or merging every floor of a high-rise office tower into one cohesive 3D tour of the building. Merge also allows multiple team members to scan different sections of a property simultaneously and integrate them later, making it possible to capture and manage even the most expansive buildings quickly and efficiently.

Field Tags further enhance the efficiency of on-site work by allowing users to add on-site observations and tags during the scanning process. No more repeat visits to capture missed details—everything can be documented in real-time, ensuring accurate, comprehensive records of the space are captured at the moment they matter most. This feature keeps teams aligned and projects moving forward without unnecessary delays.

Lastly, Matterport introduces **one-click bill-back processing**, a highly anticipated feature for enterprise customers. This simple yet powerful tool removes the headache of manual invoicing and cost allocation, allowing organizations to easily distribute expenses across departments and external partners. By automating billing processes, Matterport reduces administrative burdens and empowers teams to focus on what matters most.

MongoDB Announces General Availability of MongoDB 8.0

2 October 2024

MongoDB, Inc. announced the general availability of MongoDB 8.0, the best-performing version of MongoDB, the world's most popular document database. Millions of developers and more than 50,000 customers—including 70% of the Fortune 100 and leading global enterprises—rely on MongoDB as a trusted operational database for applications across a wide range of use cases. MongoDB 8.0 provides significant performance improvements, reduced scaling costs, and additional scalability, resilience, and data security capabilities. MongoDB 8.0 is now generally available on AWS, Google Cloud, and Microsoft Azure through MongoDB Atlas, on MongoDB Enterprise Advanced for on-premises and hybrid deployments, and as a free download with MongoDB Community Edition.

“Customers across industries tell us how critical it is for their core operational database to perform well, no matter the scale,” said Jim Scharf, Chief Technology Officer at MongoDB.

“Developers have long loved building with MongoDB, so we’ve ensured that 8.0 kept the bar extremely high for developer usability. MongoDB 8.0 was also built to exceed our customers’ most stringent security, resiliency, availability, and performance requirements, and is the most impressive version of MongoDB yet. MongoDB 8.0 gives customers the strongest possible foundation for building a wide range of applications, now and in the future.”

Many customers primarily interact with organizations through applications, and they expect reliable, responsive experiences when doing so. Likewise, organizations need to know that their applications are secure, robust, performant, and will operate efficiently under all situations. Because of its ease of use, scalability, high performance, industry-leading security capabilities, and its ability to flexibly store and process virtually any type of data, MongoDB is an ideal solution for developers building applications and the customers who use them alike. Built for the needs of a wide variety of enterprise applications, MongoDB 8.0—the best version of MongoDB ever—empowers development teams to build innovative, customer-focused applications.

“As a MongoDB customer since 2022, we’ve loved building with MongoDB. The flexibility of the document model, MongoDB’s ability to store both structured and unstructured data, and its robust scalability has made MongoDB an ideal database solution for Metaphor,” said Mars Lans, co-Founder and Chief Technology Officer at Metaphor. “We’re really excited about the capabilities that MongoDB 8.0 brings, and we look forward to building mission-critical applications with it.”

“As a company dedicated to unlocking the full potential of forests through data-driven climate projects, leveraging the right technology is paramount to our mission,” said Felix Horvat, Chief Technology Officer at OCELL. “With MongoDB 8.0, we have seen an incredible boost in performance, with some of our queries running twice as fast as before. This improvement not only enhances our data processing capabilities but also aligns perfectly with our commitment to resource efficiency. By optimizing our backend operations, we can be more effective in our climate initiatives while conserving resources—a true reflection of our dedication to sustainable solutions.”

With an emphasis on enterprise-grade security, durability, availability, and performance—including more than 45 architectural improvements and new features—MongoDB 8.0’s capabilities provide:

- Optimized performance for a wide variety of applications. As the data applications generate and use grows, inefficiencies can lead to increased infrastructure costs and decreased performance. Because many customers primarily interact with businesses through their applications, poor or inconsistent application performance can lead to customer unhappiness, lost opportunities, and lost revenue. It’s therefore imperative for organizations to ensure that their applications perform consistently well.

MongoDB 8.0 improves performance by allowing applications to quickly query and transform data. Architectural optimizations in MongoDB 8.0 have significantly reduced

memory usage and query times, and MongoDB 8.0 has more efficient batch processing capabilities than previous versions. Specifically, MongoDB 8.0 features:

- 32% better throughput
- 56% faster bulk writes
- 20% faster concurrent writes during data replication

In addition, MongoDB 8.0 can handle higher volumes of time series data and can perform complex aggregations more than 200% faster—with lower resource usage and costs.

- Innovative encryption that unlocks new use cases. Data protection and security are paramount, and safeguarding sensitive information with robust encryption is more critical than ever. Organizations must protect their data using encryption throughout its lifecycle: in transit over networks, at rest where it is stored, and while it's in use for querying and processing. However, it can be challenging to encrypt data while it is queried and processed, leaving it vulnerable to inadvertent exposure or exfiltration by threat actors.

MongoDB Queryable Encryption is a groundbreaking, industry-first innovation developed by the MongoDB Cryptography Research Group that allows customers to encrypt sensitive application data, store it securely as fully randomized encrypted data in the MongoDB database, and to run expressive queries on the encrypted data for processing—with no cryptography expertise required.

Now with range queries in MongoDB 8.0, Queryable Encryption helps reduce the risk of inadvertent data exposure and exfiltration by malicious actors with applications that store and process highly sensitive data by keeping it encrypted throughout its lifecycle, with no cryptography expertise required.

- Faster horizontal scaling for high availability. As organizations grow, their application requirements evolve. For example, scaling to support millions of users can be challenging for organizations that originally designed their applications for thousands of users. Implementing architectural changes in production applications can be challenging—they can be costly, time-consuming, and can require specialized skills. We've continued to improve MongoDB's robust scaling features in each version of the database since introducing horizontal scaling in 2010.

With MongoDB 8.0, horizontal scaling is faster and easier than ever, and at a lower cost to get started. Horizontal scaling allows applications to scale beyond the limits of traditional database resources by splitting data across multiple servers known as shards—without having to pre-provision increasing amounts of compute resources for a single server. Sharding improvements in MongoDB 8.0 distribute data across shards up to 50 times faster and at up to 50% lower starting cost, without the need for additional configuration or setup.

- Resilience for unexpected application demand. End-users expect consistent application experiences, even during periods of high demand and usage spikes. Organizations

without a highly durable operational database risk poor customer experiences, with lagging application behavior (or even downtime) during times of high demand.

MongoDB 8.0 provides greater control for teams optimizing database performance for unpredictable spikes in usage and sustained periods of high demand. MongoDB 8.0 includes the ability to set a default maximum time limit for running queries, to reject recurring types of problematic queries, and to set query settings to persist through events like database restarts to help deliver consistent performance for applications experiencing high demand.

- Reduced costs and increased scale for vector applications. The introduction of vector search opened up possibilities for unlocking insights within unstructured data. However, large-scale vector applications using full-fidelity vectors can have high processing costs and slow query times, hindering scalability and performance.

MongoDB addresses this challenge by adding the ability to leverage quantized vectors and automatically quantize full-fidelity vectors in Atlas Vector Search. Quantized vectors—compressed representations of full-fidelity vectors—require significantly less memory (73% to 96% less) and are faster to retrieve while preserving accuracy. With vector quantization, customers can build a wide range of search and AI applications at higher scale and lower cost. And when combined with Search Nodes, MongoDB's infrastructure for independent scalability and resource optimization, quantized vectors can further reduce costs and improve performance.

Generally available now, scalar quantized vector ingestion enables customers to seamlessly import and work with quantized vectors from their embedding models of choice—directly in MongoDB Atlas.

Together, these new capabilities for MongoDB 8.0 provide the fastest, most durable, secure, and reliable version of MongoDB for building a wide variety of applications across the enterprise.

Siemens brings industry leading Capital electrical and electronic systems design software to the cloud as a service

30 September 2024

Siemens Digital Industries Software announced the release of its new Capital™ X software as a service (SaaS), the cloud-enabled suite for engineering of electrical and electronic (E/E) systems.

For over two decades, Siemens' Capital™ software has been the leading solution for comprehensive E/E systems development, trusted by the world's most respected companies for engineering complex products such as cars, aircraft and sophisticated machines. Now delivered in a SaaS model, operated by Siemens, Capital X delivers the same capabilities in a more accessible, scalable, and flexible manner than ever before.

Part of the Siemens Xcelerator as a Service portfolio of cloud-enabled industry software, Capital X has been designed for rapid deployment, allowing customers to have best-in-class E/E

systems development software in dramatically shorter timeframes than traditional software implementations.

“Delivering Capital as a service makes huge sense for both existing and new customers. We’re able to deliver the same industry leading E/E design capabilities with faster implementation, enhanced collaboration and industry standard security,” said Frances Evans, senior vice president, Lifecycle Collaboration Software, Siemens Digital Industries Software. “E/E systems development is growing in sophistication across all industries and with Capital X we’re able to deliver the tools that pioneers and leaders across many industries need with greater accessibility, flexibility and scalability when and wherever they need it.”

“Companies seeking to reduce time to market, minimize prototyping and testing costs, increase systems quality, and ultimately remain competitive in today’s rapidly evolving industry should adopt cloud-based SaaS solutions for E/E systems development.,” said Chad Jackson, CEO and chief analyst, Lifecycle Insights. “Siemens’ move to deliver Capital as a service aligns with these fundamental priorities, delivering what manufacturers need in an open, accessible and flexible manner.”

Siemens brings years of experience in running high-performance cloud environments, combined with cloud-specific services for customization, integration, and migration – all built on a trusted and secure environment that delivers managed updates, remote access, automated backup and data recovery.

Siemens collaborates with GlobalFoundries to certify Analog FastSPICE for the foundry’s high-performance processes

2 October 2024

Siemens Digital Industries Software announced that GlobalFoundries (GF) has certified Siemens’ industry leading Analog FastSPICE (AFS) platform for GF’s 22FDX®, 22FDX+, 12LP, and 12LP+ Process Design Kits (PDKs). With these certifications, mutual customers using Siemens’ AFS tool can now leverage the exceptional performance and power efficiency of these GF processes.

AFS is a key part of Siemens’ Solido™ Simulation Suite software. It provides leading-edge circuit verification for nanometer analog, radio frequency (RF), mixed-signal, memory, and custom digital circuits. This proven Siemens EDA solution provides a unified platform for the broader integrated circuit (IC) design industry to develop mixed-signal and variation-aware verification capabilities with SPICE accuracy, high performance, high capacity and ease of use.

“Siemens is pleased to collaborate with GlobalFoundries as we continue to deliver advanced technologies that help our shared customers deliver innovative and compelling ICs to market more quickly,” said Amit Gupta, general manager, Custom IC Verification, Siemens Digital Industries Software. “We look forward to the successful end-products that our customers can soon develop with this new design solution kit.”

GF’s 12nm FinFET platform is built using FinFET technology and offers high-performance SoC integration with low-power memory and logic. The platform allows for seamless integration of digital and analog circuitry on the same chip, enabling more efficient designs for applications

such as wireless communications, sensor interfaces, and automotive electronics. Siemens's AFS platform is now certified for 12LP and 12LP+ processes. In addition, Siemens and GF have an active partnership with Si2's Compact Model Coalition (CMC) in the development of Open Model Interface (OMI), the industry-standard platform for enabling aging modeling and reliability analyses. GF's 12LP and 12LP+ processes are now enabled with OMI, the industry-standard platform for enabling aging modeling and reliability analyses.

Siemens' AFS is now certified for 22FDX+, a derivative of GF's 22FDX® platform with half-node performance and power improvements. 22FDX and 22FDX+ are built using FD-SOI technology that delivers high performance, minimal leakage and exceptional power efficiency. These platforms also support seamless integration of digital and analog circuitry on the same chip, enabling more efficient designs for applications such as wireless communications, sensor interfaces, and automotive electronics.

"Our ongoing collaboration with Siemens continues to deliver strong value for our shared customers and the broader GlobalFoundries ecosystem," said Richard Trihy, senior vice president of Design Technology Enablement at GF. "With our combined expertise and dedication to innovation, GF and Siemens EDA are shaping the future of manufacturing and beyond."

Stratasys Introduces a New Era of Precision and Efficiency in 3D Printed Fashion

30 September 2024

Stratasys Ltd. announced the launch of its TechStyle™ Fabric Alignment Station, the next milestone in the evolution of Stratasys 3DFashion™ technology. This solution is designed to meet the demands of high-end fashion designers, offering a unique workflow, enabling integration with embroidery, laser cutting, embossing, 2D silk printing, and many other production methods.

By extending the capabilities of the J850 TechStyle™ full color solution, designers can now enjoy unprecedented accuracy by aligning 2D printed patterns with intricate 3D designs within defined garment areas such as pockets and patches, and 3D designs on specific sections of a garment created using stitching techniques like embroidery and knitting.

This unprecedented additive manufacturing fashion solution eliminates the trial-and-error traditionally associated with aligning designs on finished garments, reducing costs, improving production times, and promoting more sustainable production by minimizing material waste.

"Today's fashion consumers value personalization, driving demand for customizable and bespoke products, empowering them to achieve a new level of design," said Zehavit Reisin, Senior Vice President, Consumer Solutions at Stratasys. "This solution is transforming the creative process and production efficiency."

Key Features and Benefits:

Enhanced Design Accuracy: The station aligns 2D patterns and 3D designs with exceptional precision, allowing designers to place 3D printed elements exactly where they are needed.

Efficiency and Cost Savings: By automating the alignment process, the station reduces the need for manual adjustments, saving time and lowering production costs.

Sustainability: The solution minimizes material waste, supporting environmentally conscious production practices.