

Contents

CIMdata News.....	5
Battery Engineering and Mass Production Need Integrated Digital Solutions - a CIMdata Commentary	5
Digital Drivers in the RFA Industry - a CIMdata Commentary	10
Have It Your Way: On the cloud and in your apps at Oracle OpenWorld 2024 - a CIMdata Commentary	15
Acquisitions.....	19
Accenture Acquires Allitix to Expand Integrated Enterprise Planning Capabilities.....	19
Aspen Technology Announces Expansion of Digital Grid Management Suite with Acquisition of Open Grid Systems	20
TECHNIA Acquires Dassault Systèmes Business from Workflow Informatics	21
Company News	21
Ansys and IonQ Are Bringing the Power of Quantum to the \$10 Billion Dollar Computer- Aided Engineering Industry.....	21
BETA CAE Systems International AGJOSCAR REGISTERED certification renewed.....	22
Blyncsy Achieves Sustainability Partner Designation in the Google Cloud Partner Advantage Program.....	23
Bridgit, North America’s Leading Workforce Planning Software, Continues Global Expansion	24
Centric Software and FoodChain ID Join Forces.....	25
CGS accelerates BlueCherry’s global growth with leadership appointments in Canada and EMEA.....	26
Digital Twin Consortium Announces the University of Central Florida Research Foundation as a New Member	27
DXC Technology and Accelya Partner to Accelerate Airline Innovation and Enhance the Traveler Experience	28
DXC Technology Names James Walker as Chief Administrative Officer	28
ENGYS Unveils a New Brand Identity to Reflect the Evolution of its CFD Solutions	29

EON Reality Announces Qlick Solutions Ltd. as a New Value Added Reseller in Kenya	30
HCLTech announces new AI/Cloud Native Lab in Singapore in partnership with Singapore Economic Development Board	30
Keysight Announces Leadership Appointments	31
L&T Technology Services Wins Prestigious Excellence Award from Caterpillar Inc.	32
LTIMindtree Awarded ‘Partner of the Year’ for Digital Transformation by Duck Creek	33
PROS Appoints Colleen Langevin as Chief Marketing Officer.....	33
Qualtrics announces Rachita Sundar as new Chief Financial Officer	34
Renesas Announces Additional Key Leadership Changes.....	34
Schneider’s sustainability program heads full speed toward its end-year targets with strong local impact.....	36
Trimble Expands Collaboration with The HALO Trust to Enhance Landmine Clearance Efforts Worldwide.....	37
Wipro, Microsoft and SAP Collaborate to Accelerate RISE with SAP Migration at Near Zero Cost	38
Event News	39
BIM World MUNICH 2024 with CADENAS	39
Centric Software to Showcase AI-Powered Product Concept to Shelf Retail Solutions at NRF 2025	40
Honeywell Announces Participation At Upcoming Investor Conferences	42
Stratasys to Showcase its Groundbreaking GrabCAD IoT Platform at Formnext 2024, Optimizing Additive Manufacturing Productivity	42
Financial News	44
Trimble Announces Third Quarter 2024 Results	44
Aspen Technology Announces Financial Results for the First Quarter of Fiscal 2025	45
Autodesk extends invitation to join financial results conference call.....	48
In the first nine months, CENIT recorded a significant year-on-year increase in consolidated sales of around 13.6% to EUR 151,433 k	49
Modelon welcomes investors to Presentation of Q3 Interim report on Wednesday, November 7, 2024, at 10.00 am	49
Xometry Reports Third Quarter 2024 Results	50
Bechtle shows international growth in third quarter	52
DXC Technology Reports Second Quarter Fiscal Year 2025 Results.....	55

Markforged Announces Third Quarter 2024 Results.....	57
Bentley Systems Announces Third Quarter 2024 Results	59
FARO Announces Third Quarter Financial Results.....	61
HOMAG- Business figures for the first nine months of 2024: Slight increase in order intake at low level	62
Nemetschek Group continues its strong and profitable growth course in Q3 2024 and confirms the outlook for full year 2024.....	63
PTC Announces Fourth Fiscal Quarter and Full Fiscal Year 2024 Results	69
Rockwell Automation Reports Fourth Quarter and Full Year 2024 Results; Introduces Fiscal 2025 Guidance	70
Modelon AB Interim report Q3 2024.....	74
NTT DATA: Financial Results for the Six Months Ended September 30, 2024	77
Implementation Investments	77
AtkinsRealis and Revizto Sign Strategic Partnership to Advance Digital Collaboration and Deliver Sustainable Solutions.....	77
Simulations Plus and Partners Awarded New FDA Grant to Validate In Vitro-In Vivo Extrapolation Methods for Complex Formulations	78
TPV Technology Selects Centric PLM to Power Product Management Efficiency	80
Product News.....	81
3drepo.io V5.12 – This time it isn’t just about being fast.....	81
Altair® PollEx™ for ECAD Now Available.....	81
Eviden Launches Evidian Orbion: A Next-Generation, comprehensive Cloud-Based Identity and Access Management Solution.....	82
KeyCreator Technology Partner Adds Browser Extension.....	83
Nemetschek Group Unveils Cutting-Edge Innovations with Allplan 2025, Vectorworks 2025, and Archicad 28	84
New PowderEase T1 Post-Processing System Streamlines Workflows and Creates Cost and Labor Efficiencies	86
Siemens extends Veloce hardware-assisted verification and validation with new Innexis shift-left software	87
Siemens’ Tessent In-System Test software enables advanced, deterministic testing throughout the silicon lifecycle	88
Stratasys H350 Now Powered by New SAF ReLife Solution Capable of Repurposing Waste PA12 Powder as Sustainable Additive Manufacturing Production Parts, at Scale	89

CIMdata News

Battery Engineering and Mass Production Need Integrated Digital Solutions - a CIMdata Commentary

7 November 2024

Hexagon Integrates Multi-Discipline Battery Physics with Manufacturing

Key Takeaways

- Companies need new, robust digital solutions that enable the design, packaging, and manufacturing of the latest innovative battery subsystems.
- New battery technologies are emerging and evolving faster due to improved understanding as innovative options are assessed using advanced simulations.
- Hexagon provides simulation capabilities that leverage electrochemistry, physics, and test data, designed to aid battery engineers to innovate across all physics, from anode and cathode details to final battery packaging into products.
- Hexagon also provides virtual manufacturing, inspection, and calibration solutions that accelerate manufacturing and reduce scrap rates.
- Furthermore, Hexagon provides state-of-the-art gigafactory digitalization and visualization to help optimize agile manufacturing planning and operations required by the accelerated development of battery products while assuring sustainability and traceability criteria remain visible.

Challenges Facing Battery Engineering

Batteries provide energy storage for complex products, from cell phones to electric vehicles (EVs) and short flight aircraft to buildings that need sustainable and reliable energy supplies. Battery engineering challenges include energy density, reliability, power density, safety, mass production, and learning for usage experience. Charging and discharging dynamics affect battery performance, durability, and safety that needs multi-disciplinary simulation and data collection to accelerate learnings. Battery pack and cell energy storage options are multiplying as investment is focused on improving energy and power density—the amount of energy stored in a specific weight or volume.[\[1\]](#)

Charging and discharging dynamics need to be balanced with electrode's electrochemistry, degradation, cooling capability, and safety. New materials and innovative manufacturing processes are needed to lower system costs. Sustainability as a core principle requires that manufacturing processes as well as factory infrastructure are optimized using trusted simulations to accelerate innovation realization and enable reduced lifecycle wastage. Merging measurements from shopfloor inspections with validation results as mass production proceeds provides product and production quality insights that identify upgrades in battery design and manufacturing. The future of battery manufacturing is smart, connected, and autonomous; it requires advanced digital ecosystems to keep a company competitive.

Hexagon is aware and is addressing the needs of today’s battery designers and manufacturers as they have summarized in The following list:

- **Designing** electrodes with the correct anode/cathode chemistry while considering morphological aspects requires significant investment.
- **Evaluating** cell performance and identifying degradation risks in the absence of physical prototypes is a significant challenge.
- Assessing the mechanical properties of a jelly-roll or stack configuration without prototyping is **highly** challenging.
- **Determining** the most effective cooling system to optimize battery performance requires significant resources when relying on a trial-and-error approach.
- **Ensuring** battery safety and developing fail-safe designs with effective mitigation strategies is critical.
- **Integrating** the battery into powertrain evaluations to ensure sufficient power for vehicle use cases presents additional complexities.

Hexagon Battery Design & Engineering Solutions

Hexagon tackles the challenges of traditional trial-and-error battery material exploration with advanced electrode-domain simulation technology. By utilizing either CT scans or synthetically created morphologies, engineers can gain microscale insights through electro-chemical simulations. The solution integrates an advanced electrochemical model developed by the renowned research institute Fraunhofer ITWM to solve thermo-electrochemical equations based on these realistic microstructures, predicting the impact of manufacturing processes on cell behavior and uncovering local degradation mechanisms. It also provides a tool for estimating the mechanical properties of jelly roll/stack materials through microscale-based structural analysis using the Representative Volume Element (RVE) modeling technique. Virtual testing of the constructed RVE simplifies estimation of macroscopic mechanical responses, thereby streamlining the process of macroscale battery structure analysis. Figure 1 summarizes the steps involved that improve battery dynamics understanding leading to optimal designs found through virtual exploration.

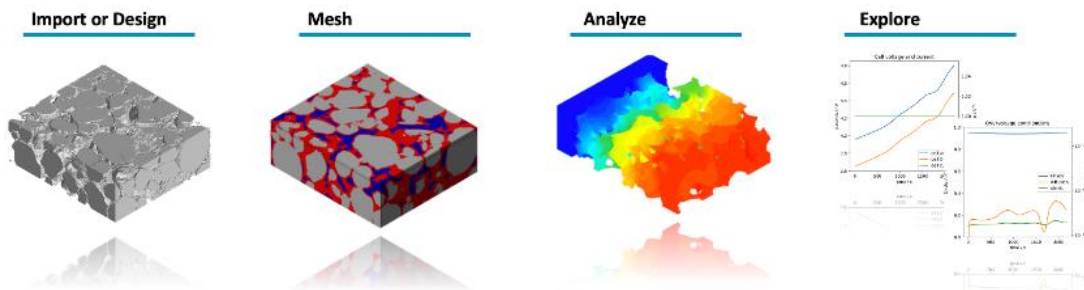


Figure 1—CT Scan Import to Optimize Battery Components Design
 (Courtesy of Hexagon)

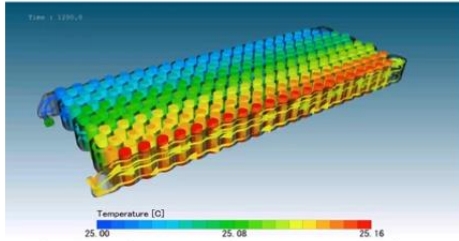


Figure 2—ECM-Backed CFD to Address Hot Spots
 (Courtesy of Hexagon)

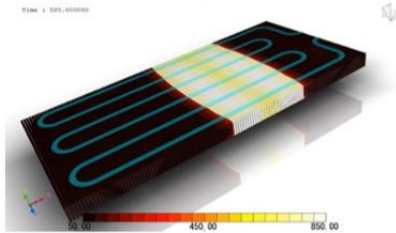


Figure 3—Thermal Runaway Modeling for Propagation
 (Courtesy of Hexagon)

Next, at the battery pack level, design needs to consider cell electrochemical response, environmental conditions, load profiles, and safety. Engineers need efficient modeling tools to access this understanding and conduct trade-off studies. Hexagon provides essential tools to support engineers in achieving their goals with two approaches for CFD: (1) the equivalent circuit model, ECM (Figure 2) and (2) the physics-based electrochemical model. Additionally, the ability to import third-party cell models allows engineers to fine tune their virtual models. For robust design of battery products, Hexagon’s thermal runaway simulation technology, shown in Figure 3 offers an efficient workflow with minimal computational load, greatly enhancing the productivity of the design process. Engineers can quickly evaluate the safety of battery products against thermal runaway during the design

phase, eliminating the need for prototyping and ensuring the product meets safety expectations.

Hexagon Battery Manufacturing Solutions

Hexagon Virtual manufacturing solutions help to optimize designs by showing the impact of the process on the product e.g., residual stress leading to potential mechanical failure. They also help reduce physical trials tests, consequently lowering costs by simulating the optimal process to accelerate manufacturing operations like laser welding. Hexagon’s Semi-Automated Separator film inspection machines, powered by AI-based visual defect detection, help with incoming goods inspection. There are also solutions that inspect installation and calibration of production machines to avoid any deviation.

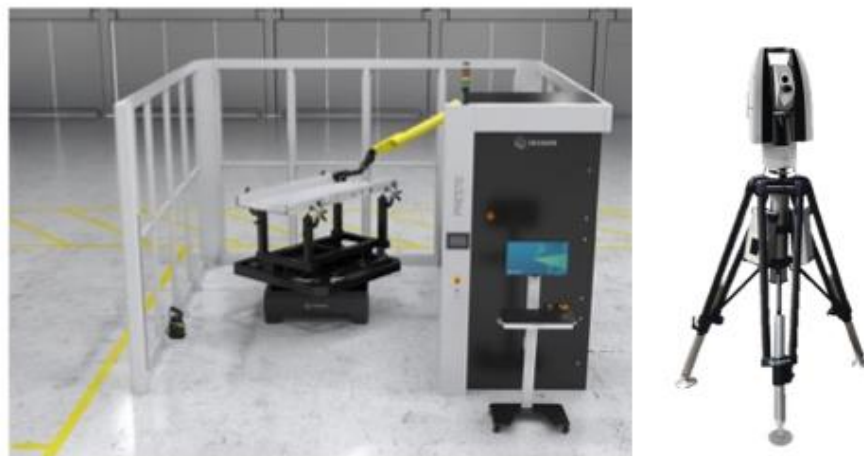


Figure 4—Hexagon’s Manufacturing Inspection Automation Equipment
 (Courtesy of Hexagon)

To enable production scaleup while maintaining high-quality standards, Hexagon has introduced PRESTO, an automated and agile end-to-end package that streamlines the inspection of hundreds of battery trays daily for instance while relying on a patented shiny surface laser scanner, shown in Figure 4.

Figure 5 summarizes Hexagon’s CT scan analysis for non-destructive inspection, allowing early detection of potential defects such as delamination, welding inclusions, or anode/cathode overhangs. This technology facilitates early quality assessment powered by Machine Learning (ML) based picture segmentation for improved accuracy.



Figure 5—CT Scan Analysis Enables NDE
 (Courtesy of Hexagon)

Hexagon Sustainable Digital Solutions for Battery Gigafactories

Central to Hexagon's strategy is the implementation of enterprise Quality Management Systems (QMS), fostering full data traceability, predictive quality, and connectivity from the shop floor to the top floor. This sustainable digitalization effort is critical not just for maintaining high standards of quality control at each production step but also for ensuring compliance with future environmental regulations. By monitoring data, product, and process quality, Hexagon's QMS solutions contribute to the larger goal of delivering greener batteries, essential for a sustainable future. By combining advanced metrology, automated inspection, non-destructive testing, and a forward-thinking QMS, Hexagon empowers battery manufacturers to achieve scalability, sustainability, and profitable innovation. Hexagon’s gigafactory digitalization and optimization solutions stand at the confluence of real and virtual worlds, pioneering a smart digital reality that harnesses the power of digital twins. These intricate digital replicas capture every aspect of the gigafactory—from the granular details of the production line to broader operational workflows. It uses state-of-the-art Hexagon geosystems sensors to capture factory reality and combines this data with 3D models to enable visualization and analysis for decision making. Figure 6 gives an example of data measurements and data traceability within a gigafactory.

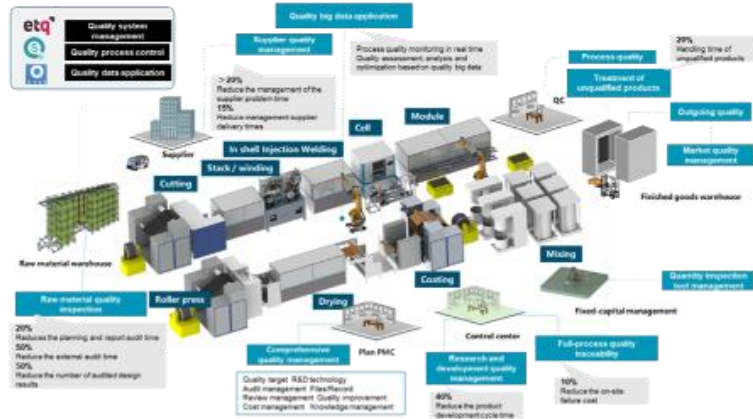


Figure 6—Quality Management Solution Within a Gigafactory Helps with Data Traceability (Courtesy of Hexagon)

This suite of solutions from engineering to quality inspection leverage the power of AI for use cases that accelerate the innovation cycle—accurately simulating physical phenomena that improves quality by preventing defects—moving key product decisions to earlier in development. By understanding the function and features earlier in development, repair cycles are eliminated lowering scrap during development and manufacturing mass production. Figure 7 highlights what is possible during design, manufacturing, and inspection.



Figure 7—Artificial Intelligence Improves Design, Manufacturing, and Inspection (Courtesy of Hexagon)

Conclusion

Hexagon’s suite of simulation, manufacturing, and gigafactory visualization solutions provides a foundation to address the needs of battery manufacturers as the competitive environment intensifies. At the 2024 Battery and EV Show recently held in Detroit, Hexagon demonstrated these capabilities to many interested engineers and managers. Keynotes and panels during the show emphasized the need for faster, agile processes which allow OEMs and their battery suppliers to quickly adjust their battery architectures and related manufacturing as the EV market changes. CIMdata believes that companies that stay agile as battery technologies evolve should be able to realize significant productivity benefits when using Hexagon’s suite of solutions.

By establishing primary themes for their broad battery solution set, see Figure 8, Hexagon provides simulation that improves coupled-physics understanding, plan manufacturing virtually, and manage the gigafactory with some of the best inspection technologies tied into their

growing AI/ML capabilities. CIMdata has seen the breadth of Hexagon’s solutions across the key disciplines that will lead battery energy storage engineering for stationary and mobility products. Agile manufacturing becomes the best practice as virtual engineering techniques are applied.



Figure 8—Hexagon’s Primary Themes
 (Courtesy of Hexagon)

Hexagon, a proven leading solution provider, builds on their strengths as they enhance their solutions across simulation, inspection, gigafactory modeling and visualization and now AI/ML. CIMdata recommends that companies looking to improve their battery engineering and manufacturing agility include Hexagon solutions in their evaluations.

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

Digital Drivers in the RFA Industry - a CIMdata Commentary

5 November 2024

Applying new technologies to accelerate design, development, and decision-making

Key Takeaways

- The Retail Footwear and Apparel (RFA) industry is under increasing pressure to accelerate the design of seasonal releases and address sustainability issues across the entire value chain.
- Automated and visual processes are becoming key to successfully meet the challenges.
- Success requires businesses in the RFA industry to adopt new technologies and working paradigms to meet the increasing speed of change and the need for personalized offerings in a sustainable manner.
- RFA industry companies must optimize processes through digitally-driven decision-making and automation with reduced executive (physical) handovers.
- RFA industry businesses must integrate and digitally transform their end-to-end lifecycle instead of using stand-alone tools and siloed processes.

- New technologies such as Generative AI and 3D modeling and simulation can be used to improve and accelerate the RFA industry's processes and decision-making.

Retail Footwear and Apparel Industry Challenges

Businesses in the retail footwear and apparel (RFA) industry face many challenges ranging from the need for more rapid design and development supported by efficient manufacturing and logistics, to ensuring maximum sell through and customer retention. Overlaying these challenges are the increasing need to address eco and sustainability (e.g., reducing waste and unsold inventory) while maintaining copyright legality around the globe. Adding to the complexity is the geographical spread of the teams involved in the process, with design teams based primarily in North America and Europe and production and sourcing based mainly in Asia. This commentary looks at how new technology and technology-enabled solutions can improve and accelerate the design development phase of the RFA industry.[\[1\]](#)

“Newness” is a driving factor for the RFA industry. RFA industry businesses must update and align their seasonal offerings to meet ever changing customer expectations for new styles and “looks” on a more and more frequent basis. Designers must rapidly design, and tailor seasonal offerings based on widely varying demographics and trends. What is hot or “in” in one geography or age group may not appeal to others in different locales and ages. RFA industry businesses must be able to spot and respond to demographic trends rapidly if they want to maintain and/or grow their market share and meet their profit goals. And RFA industry retailers need to provide a personalized experience for their customers. This has resulted in frequent, short offer cycles (Seasons).

As the number of seasons increases, RFA industry businesses must adopt to their customer's needs and expectations in the shortest possible time, with minimum cost and effort—while reducing the time to market. The key is to be agile (rapidly adapting to change). Agility means being able to make faster, more-informed decisions across all aspects of the industry, e.g., ideation of styles, fabrics, colors, patterns, geographical differences, trends and demographics, suppliers, etc.

Historically, the RFA industry has used paper-based documents to capture and manage business information and processes. This is a slow, siloed method prone to errors and delays and lacking in agility. To speed agile decision-making, RFA industry companies need to move to a digital (visual), connected planning design, development, and decision-making paradigm.

To create new seasonal offerings faster, RFA companies must be able to idealize, develop, create, view, and approve seasonal offerings more quickly. They need technology that can automatically generate designs and design options that can be visually reviewed so that decision-makers can select the designs with which to go forward into production and distribution. Increasing the agility of the design development processes also requires that roles involved in these processes (designers, suppliers, manufacturers, retailers, etc.) be able to interactively collaborate even when physically dispersed.

One of the major challenges is improving the sustainability of materials and manufacturing, distribution, and recycling processes throughout the RFA industry. Reducing material waste,

reducing product carbon footprint and, most importantly, being able to recycle, reuse, and repurpose unsold or returned garments is rapidly growing in importance. RFA companies are being tasked with showing how they are becoming more eco-friendly. More importantly, they need to be able to substantiate their claims through a clearly understood digital footprint across the entire product lifecycle.

For each design, an RFA industry business must create complete, accurate, and validated copyright information. They must ensure that the design is not replicating another design and must document the design so it will be copyright protected in the future. Automatically creating and validating copyright information can save RFA companies significant time and expense.

Technologies That Are Accelerating the RFA Industry

There are many new technologies that can be used to accelerate RFA industry design and development. Generative AI and Visual Planning are examples of a technology and technology-based solution that deliver the capabilities needed to address RFA industry challenges.

Generative artificial intelligence (Gen AI) refers to applying deep learning to large language models (LLMs) that can generate text, images, videos, or other content based on the content of these models often in response to human prompts. Gen AI models learn the patterns and structure of their input training data and then generate new data that has similar characteristics. At a high level, generative models encode a representation of their training data and draw from it to create a new work that's similar to but not identical to the original data. Gen AI can be used to automated design and supporting content (e.g., bill of material (BOM), measurements and construction, etc.) generation.

Visual planning is a technology-based solution that applies visual media, e.g., charts, videos, dashboards, etc., to the review, planning and decision-making processes associated with a retailer's business strategy and roadmap, e.g., 3D-based planning. It provides users and decision-makers a quick and easy way to view design offerings, schedule status and goals, and organize work. Benefits include faster review and comparison of designs, easy to spot bottlenecks, a more efficient working paradigm for users, enhanced clarity of information, and better communication and collaboration between individual and application systems.

Other digital technologies and solutions that have the potential of significantly improving efficiencies in the RFA industry include Virtual/Augmented/Mixed reality, 3D modeling and simulation, and photorealistic rendering and modeling.

Applying Gen AI to RFA Industry Design and Development

There are many functions to which Gen AI can be applied within the RFA industry. It can replace some functions and complement others. It is important to note that Gen AI is not intended to replace all the RFA industry roles. The creativity of humans will always be essential to the industry. However, Gen AI can complement and augment human resources. And it can "learn" from them as human-generated work is added to the LLMs that the Gen AI engines use to create their output.

First and foremost, Gen AI can be used to automatically generate fashion designs and variations—styles, sizes, fabrics, colors, patterns, and demographics (e.g., age, sex, and geographical variations). It can create visual images of each variation so that they can be easily reviewed and compared as part of an evaluation and selection process. Gen AI can create many more variations much faster than possible by human resources. This enables businesses in the RFA industry to create and evaluate more options and/or tailor a design to meet specific demographics, all in a significantly reduced timeframe.

Gen AI can be used to significantly improve process efficiencies in managing development components like BOMs, measurements, and cost sheets (to name a few). As an example, it can be used to analyze designs to identify the BOM components—materials, placement—and automatically create a Shell BOM (initial BOM). As the AI engine becomes more efficient, it can generate the complete BOM with minimum human interference. This information can then be fed automatically to cost models and manufacturing for production purposes.

Similarly, tracking is a key area within the development process that can gain from Gen AI based solutions. Trackers are the seasonal activity milestones and deadlines that need to be met. Currently, the majority of trackers are generally maintained in Excel-based spreadsheets with manually fed dates (targets and actuals). Even the currently available digital tracking platforms have some kind of manual intervention. Overall, the information is, at best, historical (past the event), or at worst inaccurate. Gen AI can help solve this issue with “predictive trackers” that analyze the historical values across selected KPIs—time to finalize Designs, time to get Samples approved, individual supplier efficiency, number of developments in the pipeline, etc., to “forecast” the likelihood that each development milestone will be completed on time vs. potential delay. This information can be used by relevant stakeholders to adjust their development plans and meet seasonal calendar deadlines.

As Gen AI creates designs, it produces a visual image or model of the design. It can then apply multiple materials, colors, and patterns to each variation of the design. This visual content can then be used by reviewers and decision-makers to select which design variation will be produced and sold. The visual images can also be used as part of the visual planning process, in communication and collaboration with manufacturers, suppliers, and retailers, and as part of retail sales and marketing assets.

One of the most tedious and detail-oriented tasks in the RFA industry is generating the appropriate copyright content for each design and verifying that each copyright does not violate any other copyright. Gen AI can automatically create the required copyright content for each design based on pre-defined templates. It can then search pertinent databases to ensure the legality of the copyright. This can significantly speed up copyright processing while reducing the cost and resources required to ensure compliance.

Additionally, Gen AI can support personalization options for each design variation by identifying if, where, and how a design might be customized to meet geographic or individual demands, e.g., add or remove specific design elements like collar, zipper, etc. Gen AI can also be used to support customer service by augmenting help desks by responding to customer enquiries, etc.

Visual Planning Accelerates Informed Decision Making

Visual planning is an emerging capability that can significantly speed up the RFA design and develop process by transforming a numerical exercise to a more visual activity.

As design moves from 2D to 3D, the 3D artifacts can be used to present a more visual representation of the plan vs. actual review. Typically, merchants provide guidelines on how they want the seasonal line to look—high level design inputs, target pricing, etc. As the Design takes shape, the 3D artifacts can be interposed with the information provided by merchants to give a more visual representation to the line. This will greatly speed up the process of review and adoption or rejection of design offerings. Using visual modes of fashion designs speeds up the pre-season review and selection process, enabling an RFA industry company to shorten the time to review and select the new seasonal offerings. Reviewers and decision-makers can visually compare many more variations in a significantly shorter timeframe. This process can be extended right from the initial black and white sketch review to the line finalization, with the intermediate stages of adding fabric, color, size, etc.

This capability enables designers and decision-makers to provide design direction—inspirations, palettes—that can then be quickly incorporated into updated designs. This visual capability continues throughout the review of style options (styles, color, fabric, patterns) and accelerates the decision processes at every level.

In conjunction with 3D models, visual planning can be used to develop and view store display options (e.g., which designs, fabrics, etc., to put on mannikins on the store floor, rack layouts, etc.).

ITC Infotech: Advanced Solutions for the RFA Industry

ITC Infotech is a leading global business solution and technology services provider, enabling future-ready IT Services for its clients. ITC Infotech's dedicated Retail PLM practice has the breadth and depth of expertise to help RFA businesses realize the full potential of their digitalization initiatives. Through its deep domain expertise and extensive implementation experience in the RFA industry, it provides the necessary thought leadership and direction to help its clients digitally transform their businesses to achieve maximum productivity and profitability.

ITC Infotech's team of RFA industry experts deliver both functional and technical services that help clients define an optimum digital transformation roadmap and then works closely with them to bring their transformation to fruition. Using its proven library of industry use cases, business and category specific accelerators, and ready to deploy point solutions, ITC Infotech's implementation experts are able to maximize ROI for their clients by significantly reducing time from project initiation to production go live use.

ITC Infotech has also established multiple partnerships with leading technology companies to ensure access to the base framework required to build next gen solutions using AI and 3D. These partnerships help ITC Infotech leverage the core solutions (e.g., LLMs for Gen AI) to build frameworks that can easily be aligned with client specific use cases and solution needs.

Summary

The RFA industry faces increasing challenges in accelerating its design and development processes. More, and shorter seasons require faster ideation, development, and production of new fashions that must meet widely different consumer demographics. To address these challenges, RFA businesses must be able to make better, faster, more-informed decisions at all phases of their business. They need to be able to quickly generate, review, and select designs (including fabrics, patterns, colors) while collaborating with their manufacturing partners and insuring copyright legality. Additionally, RFA industry retailers need to be able to visually design their retail layouts as well as create marketing and sales materials that will appeal to their target customers.

New and emerging digital technologies such as Gen AI, 3D modeling, and visual planning provide the tools necessary to address these challenges and enable RFA businesses to undergo the digital transformations required to achieve and maintain success in today's highly competitive global markets. These technologies can automatically generate and compare fashion design options, create and validate copyright information, and provide information in visual paradigms that improve and accelerate planning and decision making.

CIMdata recommends that RFA industry companies include ITC Infotech technology, solutions, and services when evaluating their needs for creating modern, technology-driven RFA industry design and development environments and processes.

[1] Research for this paper was partially sponsored by ITC Infotech.

Have It Your Way: On the cloud and in your apps at Oracle OpenWorld 2024 - a CIMdata Commentary

8 November 2024

Key Takeaways

- Oracle has built deep partnerships with the leading Infrastructure as a Service (IaaS) providers—AWS, Microsoft, and Google—to better support multi-cloud and hybrid enterprise architectures.
- After their success using the Redwood design system to revamp their Human Capital Management (HCM) offerings, Oracle accelerated Redwood's application to their supply chain management (SCM) offerings, which include their product lifecycle management (PLM) capabilities.
- Redwood is essential to embed Oracle's extensive artificial intelligence capabilities in their applications portfolio, including supporting user extensions of generative AI (GenAI) use cases. Oracle delivered over 100 AI use cases last year and the pace is quickening.
- Smart Operations seeks to replace manufacturing execution systems (MESs) in most applications, while extending Oracle's reach in the digital thread.

CIMdata attended Oracle CloudWorld 2024, held at The Venetian in Las Vegas, NV on 9-12 September 2024. [1] According to Oracle staff, more than 15,000 people attended this four-day event.

Many solution providers issue a raft of press releases during their major customer event. Oracle made some major announcements at Cloud World again this year. At previous Oracle events, their executives discussed the importance of multi-cloud support to their customers and prospects. CIMdata echoes this sentiment because we see it often with our industrial consulting clients. Their chosen Independent Software Vendors (ISVs) focus on delivering their offerings on one IaaS provider. (This has created business opportunities for the major global systems integrators to repackage those solutions for delivery on other IaaS providers.)

Where Oracle differs from their IaaS competitors is their broad portfolio of enterprise software offerings. Their high-level architecture is shown in Figure 1. Over the last two years, Oracle has announced major partnerships with Google Cloud [2] and Microsoft Azure [3] which gives customers direct access to Oracle database services running on Oracle Cloud Infrastructure (OCI) and deployed in Microsoft Azure and Google Cloud datacenters. During OpenWorld Oracle announced a new partnership with Amazon Web Services (AWS) bringing OCI to the leading cloud service. [4] According to Gartner, these three companies have 70.2% of the worldwide IaaS market. [5] They also announced an expansion of their partnership with Microsoft Azure around Oracle Database@Azure [6] and the general availability of Oracle Database@Google Cloud in four regions in the United States and Europe. [7] Clearly Oracle is committed to supporting multi-cloud scenarios and their partners are helping make this support a reality around the world.

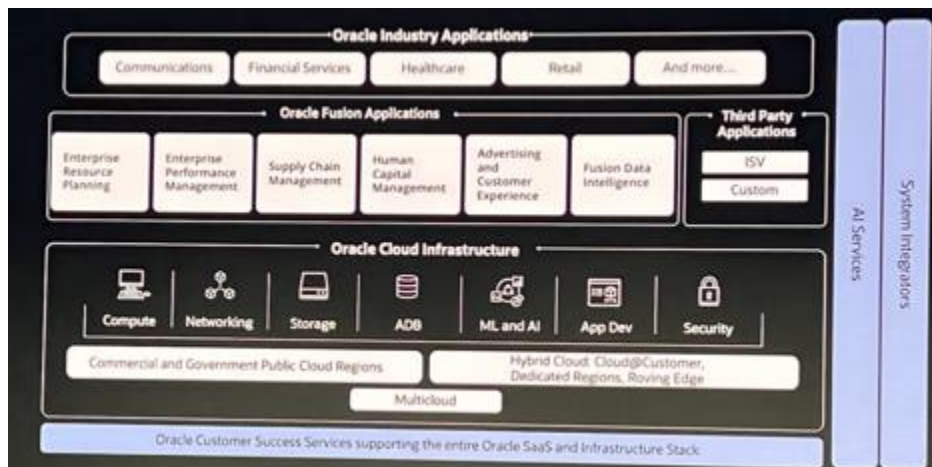


Figure 1—Oracle Applications, Infrastructure, and Technology
 (Courtesy of Oracle Corporation)

Oracle is expanding the use of their Redwood design system, a total rethinking of the Oracle applications user experience (UX), across their broad portfolio. [8] Their HCM solution was first to be “Redwood-ized” with plans to expand to their considerable portfolio. The initial fruits of their UX investment in their SCM offerings were highlighted in an Oracle Fusion Cloud PLM session led by Mr. John Kelley, Vice President of PLM at Oracle. Redwood is a key element in

OCI, as shown in Figure 1. Redwood provides much more than a common “look and feel.” It is designed to support four levels of tailoring and customization. **Guided Processes** help users through standard use cases that can be built into the system. Guided Journeys can help adopters add more attributes or create reports built using managed data. More importantly, **Guided Journeys** help adopters build augmented intelligence into their work processes, using third-party large language models (LLMs) to support retrieval augmented generation (RAG) from content selected (and uploaded) by the adopters.^[9] For example, an employee wants to check if a medical procedure is covered by their company insurance plan. If you asked GenAI without RAG it would tell where to look in your plan document to find the answer. More information but not really helpful. RAG can provide the context of the request from information about the requestor, i.e., what plan they have, what is covered, and other more useful information to take action. GenAI built into OCI can summarize the information and, importantly, includes links to the plan content used to create the summary. Explanatory capabilities are essential to making augmented intelligence credible and Redwood highlights its sources clearly. **Business Rules** offer low code, no code capabilities which are typically used by system admins. Leveraging Oracle APEX, first introduced in 2004, and its Visual Builder Studio application, Oracle’s customers can customize their applications so they are upgradable to new versions as they become available. This is important given Oracle’s quarterly release schedule. Finally, the **Logic Rule Builder** can support use cases like criteria-based security and pricing logic.

As Mr. Kelley took questions from the PLM-savvy audience, one could almost see the light bulbs go on as frustrated users literally saw that many issues would fade away as the move to Redwood progresses. Many session attendees clearly were early Fusion Cloud PLM adopters, but Agile users in attendance were also impressed by the progress. In a later meeting, Mr. Kelley said the move to Redwood in their SCM applications started about 18 months ago but has really accelerated since the April analyst meeting. Based on the audience’s reaction in the PLM session, Oracle product management is on the right track with these enhancements. Perhaps, as the session title said, “Now Is the Time to Move to the Next Generation of Oracle Cloud PLM.”

At the April analyst meeting, Oracle announced new Smart Operations offerings which they described as ‘intelligent guidance for manufacturing execution’ providing connected data from the supply chain digital thread, equipment, and the workforce. Smart Operations leverages core Oracle Fusion SCM capabilities. Using Redwood, Oracle can offer real-time recommendations combined with automated production adjustments.

In April, Oracle described four role-based capabilities:

- Operator Workbench—automated data capture and continuous monitoring
- Digital Work Instructions—visual guidance on real-time manufacturing execution processes
- Maintenance Technician Workbench—GenAI assistance with tasks, service history, and a knowledge base

- Production Supervisor Workbench—AI-powered anomaly detection and opportunity insights

In his CloudWorld keynote, Mr. Steve Miranda, Oracle Executive Vice President of Fusion Application Development, listed three newer additions to their Smart Operations offering:

- Maintenance Supervisor Workbench
- Inventory Shortage Workbench
- RFID for Replenishment

During his remarks, Mr. Miranda termed Smart Operations a “modern day MES.” In a focused session, Mr. Geoffroy de Carbonnel, VP, Product Strategy SCM Manufacturing, posed a more provocative question: “Is MES obsolete?” In certain contexts, Mr. de Carbonnel says yes. With their Smart Operations offerings Oracle hopes to minimize the need for third-party MES solutions. Of course, he admitted there will always be environments needing an on-premises specialized MES, and Oracle has the APIs to connect with them. In closing, Mr. de Carbonnel suggested that Oracle is just starting their efforts to help clients on their journey from manual operations to “lights-out” manufacturing.

The information covered in this Commentary is a small fraction of the content presented at CloudWorld; it focuses on PLM or PLM-adjacent topics. Their partnerships with the leading hyperscalers AWS, Microsoft, and Google will help simplify often complex hybrid environments for PLM and other enterprise applications. Redwood makes it easy to bring GenAI to the point of work for Oracle users, enhancing their efforts by leveraging LLMs and corporate content and data. Oracle already made significant progress with Redwood in their SCM suite but the work is really just beginning. Oracle claims that most enhancements are triggered by user requests, and user engagement with GenAI should provide for lively interactions between users and product development teams. Smart Operations should reduce the need for specialized MES at many customers, but these initial single process examples are just a start. Support for more complex operations are in development. Overall, this is only the beginning for Redwood and GenAI as part of Oracle’s complex platform offering. CIMdata looks forward to what innovations 2025 will bring.

[1] Research for this paper was partially supported by Oracle Corporation.

[2] <https://www.oracle.com/news/announcement/oracle-and-google-cloud-announce-groundbreaking-multicloud-partnership-2024-06-11/>

[3] <https://news.microsoft.com/2023/09/14/microsoft-and-oracle-expand-partnership-to-deliver-oracle-database-services-on-oracle-cloud-infrastructure-in-microsoft-azure/>

[4] <https://www.oracle.com/news/announcement/ocw24-oracle-and-amazon-web-services-announce-strategic-partnership-2024-09-09/>

[5] <https://www.gartner.com/en/newsroom/press-releases/2024-07-22-gartner-says-worldwide-iaas-public-cloud-services-revenue-grew-16-point-2-percent-in->

[2023#:~:text=Amazon%20retained%20the%20No.,%2C%20Google%2C%20Alibaba%20and%20Huawei](#)

[6] <https://azure.microsoft.com/en-us/blog/microsoft-and-oracle-enhance-oracle-database-azure-with-data-and-ai-integration/>

[7] <https://www.oracle.com/news/announcement/ocw24-oracle-and-google-cloud-announce-the-general-availability-of-oracle-database-at-google-cloud-2024-09-09/>

[8] Redwood was first announced at Oracle OpenWorld in 2019. CIMdata wrote about Redwood in our Commentary about the 2024 Oracle Applications & Industry Summit: <https://www.cimdata.com/en/resources/complimentary-reports-research/commentaries/item/24872-enabling-smart-user-experiences-2024-oracle-applications-industry-analyst-summit-commentary>

[9] <https://www.oracle.com/news/announcement/ocw24-oracle-offers-powerful-generative-ai-rag-agent-and-enhanced-ai-services-2024-09-10/>

Acquisitions

Accenture Acquires Allitix to Expand Integrated Enterprise Planning Capabilities

4 November 2024

Accenture has acquired Allitix, a consulting and technology company specializing in Anaplan solutions with capabilities across financial planning and analysis, sales performance management and supply chain. The acquisition further strengthens Accenture's connected planning capabilities using Anaplan, a platform that helps organizations see, plan and lead better business outcomes, and enhances its ability to help clients standardize planning practices across business functions for increased agility, productivity, and data-driven decision making.

Founded in 2017, Allitix is headquartered in Irvine, California. As a trusted Anaplan partner, Allitix provides tailored Anaplan-based solutions across finance, sales, supply chain, and human resources functions, with specific competencies in the manufacturing, consumer, technology, media and telecom and financial services industries.

“Demand for connected enterprise planning is on the rise, given its ability to unlock business value and spur total enterprise reinvention,” said David Leckstein, senior managing director and lead, Americas Technology at Accenture. “Allitix’s highly skilled talent, deep domain expertise, and agile approach to implementation complements our broader digital capabilities and further expands our ability to deliver integrated enterprise planning transformations for our clients that drive better, faster insights and bottom-line value.”

Allitix has significant experience in implementing scalable, flexible and impactful business planning frameworks that enable enterprises to adapt to dynamic market conditions. The acquisition adds 73 employees, including over 60 Anaplan functional and technical professionals to Accenture Technology in North America, with expertise across solution architecture, model building, integration, and data management.

“Joining Accenture is an exciting opportunity for us. Our shared vision for transforming the way organizations operate through connected planning makes this a perfect fit,” said Mark Ishikawa, founder and managing partner, Allitix. “By combining Accenture’s technology and consulting capabilities and global reach with our deep expertise in Anaplan, we can offer unparalleled expertise, scale, and support to help our clients navigate complex planning environments and stay ahead in a rapidly evolving market.”

Terms of the transaction were not disclosed.

Aspen Technology Announces Expansion of Digital Grid Management Suite with Acquisition of Open Grid Systems

4 November 2024

Aspen Technology, Inc., a global leader in industrial software, announced that it has entered into a definitive agreement to acquire Open Grid Systems Limited, a global provider of network model management technology and a pioneer in developing model-driven applications supporting open access to data through industry standards. With this acquisition, AspenTech’s Digital Grid Management (DGM) suite will offer utilities a comprehensive, fully integrated network model management solution to address the acceleration of new grid assets, such as renewable generation, with increased flexibility to manage and scale network model data both inside and outside the control room. The transaction is subject to receipt of customary regulatory approvals and is expected to close before the end of 2024.

Open Grid Systems’ unique model-driven technology enables utilities to view, edit, transform and analyze power system data with extensive support for industry-specific interoperability standards, enabling efficient data sharing across utility stakeholders and system operators. Combined with AspenTech’s existing DGM suite, the integration of Open Grid Systems’ technology will create an unrivaled data-centric infrastructure to enable alignment across utility functions, resulting in improved reliability and overall grid system performance for transmission and distribution companies.

“AspenTech is committed to expanding its industry-leading software that enables utilities to address the increasing electrical grid complexities,” said Antonio Pietri, President and CEO of AspenTech. “By integrating Open Grid Systems’ technology into the AspenTech DGM suite, we will further enable the visibility, management and optimization of grid assets across planning, operations and maintenance functions, ensuring grid resiliency and stability for our customers.”

Alan McMorran, Founder and Managing Director of Open Grid Systems added, “We are excited to join AspenTech and have the opportunity to advance our technology, expand resources for our customers and employees, as well as have a broader reach to help utilities around the world unlock the unprecedented value of an integrated solution.”

Founded in 2010 and headquartered in Glasgow, Scotland, Open Grid Systems delivers innovative model-driven software solutions to utilities across the world. With leading expertise in the areas of data management, information modelling, machine learning, data visualization and power system network analysis software, the company is committed to supporting open

access to data using standards and cutting-edge technology. In addition, it has a long history of participation in International Electrotechnical Commission (IEC) standards groups and collaborating with experts around the world to develop and promote the adoption of standards throughout the electrical industry.

TECHNIA Acquires Dassault Systèmes Business from Workflow Informatics

1 November 2024

TECHNIA, the #1 knowledge leader in virtual twin solutions and digital engineering, today announced the acquisition of the Dassault Systèmes BIOVIA business, from Workflow Informatics Corp.

This acquisition expands TECHNIA Life Sciences' customer base in North America. As a global partner of Dassault Systèmes and BIOVIA, TECHNIA can now offer comprehensive solutions to enhance operations from research to production. With extensive experience in BIOVIA products such as Pipeline Pilot, ScienceCloud, CISPro, and Electronic Lab Notebooks (ELN), TECHNIA is committed to providing software, services, training, and support while strengthening its local presence for both new and existing customers in North America.

"We have assembled an exceptional life sciences team, enthusiastic about collaborating with our existing and new customers. By offering comprehensive and holistic consultancy and support for the BIOVIA portfolio, our goal is to provide even more value to our customers in North America and worldwide."

Magnus Falkman Chief Executive Officer | TECHNIA

"We look forward to supporting our new customers in their continued journey of innovation. Driven by our mission to help deliver 'Smarter products faster'. Our North American and wider TECHNIA team are well placed to serve our customers with specific scientific solutions around BIOVIA as well as broader virtual twin technologies to assist with their digitalization ambitions."

Michael Hurst UK & NAM Managing Director | TECHNIA

Company News

Ansys and IonQ Are Bringing the Power of Quantum to the \$10 Billion Dollar Computer-Aided Engineering Industry

6 November 2024

IonQ, a leader in the quantum computing industry, and Ansys have joined forces to integrate quantum computing into the \$10B computer-aided engineering (CAE) industry. Together, IonQ and Ansys aim to accelerate simulation, expand high-fidelity design exploration, and reduce product development timelines, enabling faster market entry for innovative products.

This partnership aims to make simulation accessible to both quantum experts and non-experts, with the goal of enhancing enterprise value and streamlining product development processes. Ansys solutions are used in product development across industries and account for a significant portion of all modeling and simulation in the CAE market. As IonQ's quantum computers

advance and outpace classical systems on specific tasks, integrating them with Ansys' technology for complex simulations will open the door to new discoveries and innovations. With these advancements, Ansys will gain access to critical infrastructure to test and refine its technology in a quantum environment.

IonQ will use Ansys' multiphysics technology — including structural, optical, photonic, and electromagnetic simulation software — to design and optimize key components for extremely scalable and performant next-generation quantum computers.

“We are excited to work with IonQ to create a new generation of quantum-based solvers that could simultaneously increase predictive accuracy and expedite simulation run time,” said Prith Banerjee, Chief Technology Officer at Ansys. “Our goal is to enable every Ansys customer to seamlessly access the power of quantum computing to accelerate innovation and get their products to market sooner. We believe that quantum computing holds tremendous benefit for the CAE market, and IonQ's technology excels at offering solutions to complex simulation challenges that were previously out of reach for classical computers.”

“IonQ has made significant strides in demonstrating the value of quantum computing to businesses across industries, such as pharmaceuticals, finance, automotive, and aerospace,” said Ariel Braunstein, IonQ's SVP of Products and Applications. “We believe that Ansys' simulation software will be crucial to designing and scaling our most advanced systems. This partnership will also give IonQ broader access to the multi-billion dollar Computer-Aided Engineering market, which accounts for a substantial portion of global High-Performance Computing usage.”

BETA CAE Systems International AGJOSCAR REGISTERED certification renewed

6 November 2024

BETA CAE Systems International AG is proud to announce that has been successfully renewed its acceptance on to JOSCAR, and continues to be recognised as a fully compliant supplier for several defence companies and major organisations. BETA CAE Systems International, being JOSCAR certified since October 2021, satisfies all the requirements to be fully registered on the JOSCAR supplier accreditation register, as set out by participating buying organisations.

JOSCAR (the Joint Supply Chain Accreditation Register) is a collaborative accreditation and compliance system, used by the aerospace, defence, and security industry, to act as a single repository for pre-qualification and compliance information on approved suppliers.

Being certified as a registered member and a trusted supplier for the aerospace and defence sectors, assures our clients and partners that the software and services we provide are of the highest quality and comply with the industry standards. Moreover, since organisations from these sectors have strict information security requirements, being registered to JOSCAR assures our customers that we meet their demands for information and data protection.

Blynscy Achieves Sustainability Partner Designation in the Google Cloud Partner Advantage Program

4 November 2024

Blynscy, a Bentley Systems, Incorporated company, announced that it has achieved the Google Cloud Ready – Sustainability designation in the Google Cloud Partner Advantage Program. By earning the Sustainability designation, Blynscy has proven its success in building and producing solutions and tools on Google Cloud to help customers achieve their sustainability and Environmental, Social, Governance (ESG) goals.

The designation was awarded based on Blynscy's AI-powered road maintenance and asset inventory technology, which is used by state Department of Transportation (DOT) agencies across the United States to conduct automated roadway inspections using crowdsourced dash camera imagery combined with AI analytics. Insights provided by Blynscy's technology can supplant the need for state DOT operations and maintenance departments to conduct manual inspections of roadway conditions, which can help remove tens of thousands of pounds of carbon emissions from the air annually for each vehicle removed from these costly activities.

The new solutions of the Google Cloud Ready – Sustainability partner program will help customers achieve meaningful climate objectives for their businesses. Partners with this designation deliver solutions that reduce carbon emissions, increase the sustainability of value chains, help organizations process ESG, or help them identify climate risk for increased resilience.

Google Cloud Ready – Sustainability will provide Blynscy's customers with a facilitated journey to discover and use proven partner solutions, powered by Google Cloud, in their sustainability business transformations.

Blynscy is the industry leader in providing intelligent roadway insights, automated asset management, and a near real-time status of road infrastructure to local governments and state DOTs. Blynscy is the only company that utilizes crowdsourced imagery from over 1 million vehicles already on the roads, machine learning, and artificial intelligence to make roadways smarter, safer, more equitable, and more efficient.

"Artificial intelligence is playing an important role in building a more sustainable world," said Mark Pittman, Blynscy CEO and Bentley's Director of Transportation AI. "Our approach leverages this new technology to extend the useful life of our assets, reducing their carbon impact on the world and their financial impact on our public agencies' budgets."

Google Cloud Ready – Sustainability is part of the Google Cloud Partner Advantage program, designed to maximize Google Cloud partners' success across business models, customer requirements, success metrics, and strategic priorities. Google Cloud Marketplace Sustainability Hub provides customers with easy access to validated sustainability solutions and will showcase Google Cloud Ready for Sustainability solutions.

Bridgit, North America's Leading Workforce Planning Software, Continues Global Expansion

7 November 2024

Bridgit, the leading provider of workforce planning solutions for the construction industry, announced the launch of its flagship product, Bridgit Bench, into the European Union (EU) and United Kingdom (UK). This expansion, following Bridgit's first million-dollar quarter last year and five consecutive quarters of revenue growth since, marks a critical milestone in our commitment to empower construction leaders with tools that optimize workforce utilization, enhance project visibility, and support team collaboration across regions.

"The European construction market is experiencing rapid growth and demand for construction innovation, partially driven by significant labor shortages," said Mallorie Brodie, CEO of Bridgit. "Bridgit is uniquely positioned to help contractors get the most from their teams with our people-centric workforce planning and best practices baked into the platform."

Bridgit is a purpose-built, GDPR-compliant solution, offering real-time insights into workforce allocation, project timelines, and resource availability.

Key features of Bridgit Bench include:

- **Real-Time Workforce Visibility:** Track project member assignments, skills, and availability at a glance.
- **Automated Forecasting and Reporting:** Generate accurate forecasts for workforce needs and make data-driven decisions.
- **Seamless Team Collaboration:** Centralize communication around workforce assignments to streamline project planning.

Construction leaders across the EU/UK can now benefit from Bridgit's platform and team, trusted by North American industry leaders, including over 30% of the ENR 400, to fit company-specific needs, from small construction teams to enterprise-level operations.

"As a trusted partner, Bridgit has streamlined our Operations team's ability to assign our talent to our diverse portfolio of projects and maintain staffing needs. With Bridgit launching in Europe, it will allow us to continue to support our global teams. We look forward to extending our partnership with them into Europe." – Alexander Gutman, Chief Technology Officer, Gilbane Building Company

The construction sector in Europe is facing a significant labor shortage, nearly three times higher than a decade ago. To help adjust to this reality, construction leaders must reach new levels of workforce communication, project automation, and overall efficiency. By leveraging Bridgit Bench, EU/UK firms can stay ahead of project demands, reduce inefficiencies, and drive sustainable growth.

Bridgit's expansion underscores its commitment to addressing global workforce challenges by providing construction firms with powerful, user-friendly tools that directly combat labor

shortages. By leveraging Bridgit Bench, EU/UK firms can stay ahead of project demands, reduce inefficiencies, and drive sustainable growth.

Centric Software and FoodChain ID Join Forces

5 November 2024

Centric Software® is pleased to announce a strategic partnership with FoodChain ID, a trusted technology solutions provider for food safety, quality and sustainability. This collaboration aims to enhance supply chain transparency and drive sustainable practices across the food, beverage and cosmetics sector. Centric Software provides the most innovative enterprise solutions to plan, formulate, develop, procure, manufacture and sell consumer goods products in food & beverage, grocery, cosmetics & personal care, fashion and multi-category retail to achieve strategic and operational digital transformation goals.

As the global demand for transparency in food sourcing and production continues to rise, this partnership brings together Centric PLM™ with FoodChain ID's expertise in food safety and regulatory compliance. Together, they will empower brands to streamline their product development processes while ensuring adherence to sustainability standards and food safety regulations.

“Our partnership with FoodChain ID represents a significant step forward in our commitment to supporting food and cosmetic manufacturers in their quest for greater visibility and accountability in their supply chains,” said Saurabh Deshpande. “By integrating our PLM solutions with FoodChain ID's robust platform, we are providing our customers with the tools they need to meet consumer demands for transparency while promoting sustainable practices.”

A key component of this partnership is Centric PLM's FoodChain ID Compliance Analysis Connector. This powerful connector allows food, beverage and cosmetics brands to seamlessly perform compliance analysis evaluations in Centric PLM leveraging FoodChain ID's extensive global regulatory compliance database and analysis engine. By leveraging this connector, companies can ensure that their products meet worldwide regulatory requirements and consumer expectations for quality and transparency.

FoodChain ID's solutions provide comprehensive insights into the food/beverage/cosmetics supply chain, enabling companies to trace their products from ingredient origins to the shelf. By leveraging Centric Software's capabilities, brands will gain enhanced visibility into their product development processes, allowing them to make informed decisions that align with sustainability goals.

“We are thrilled to partner with Centric Software, as this collaboration aligns with our commitment to enhancing food safety and transparency,” said Clinton Chadwick, Vice President, Strategic Partnerships. “Together, we aim to drive innovation and empower businesses to make informed decisions that benefit consumers and the industry as a whole.” The collaboration will include joint initiatives aimed at educating about best practices in supply chain management and sustainability, as well as the integration of technology solutions that simplify compliance with evolving regulations.

This partnership underscores both companies' dedication to fostering a more sustainable future for the food and beverage industry. Together, Centric Software and FoodChain ID are poised to lead the charge in transforming supply chain management by prioritizing transparency and safety.

CGS accelerates BlueCherry's global growth with leadership appointments in Canada and EMEA

5 November 2024

CGS[®], a global provider of software applications, enterprise learning, customer experience and call center outsourcing services, announced two additions to its BlueCherry leadership team to further accelerate global growth. Jamie Elias joins CGS's BlueCherry team as Managing Director & Country Head for Canada, while Wesley Ekman takes on the role of VP for EMEA. The appointments reflect CGS's commitment to helping fashion apparel, footwear, accessories, and consumer goods brands navigate increasingly challenging supply chain management issues – bringing the value of BlueCherry's comprehensive solution suite to more customers worldwide.

"BlueCherry is the right fit for supply chain management in the fashion industry. Over decades, we have continuously innovated and refined our products and solutions to help clients increase productivity and efficiency while driving growth in competitive markets. No other company brings the specialization and expertise to challenging fashion supply chains the way we do," said Paul Magel, President of the CGS Applications Division. "The additions of Jamie and Wesley underscore our commitment to these regions and will strengthen our client connections as we scale BlueCherry's business in key fashion markets."

As Managing Director & Country Head for Canada, Jamie is focused on helping her clients overcome complex supply chain challenges and improve operational efficiency. By leveraging BlueCherry's integrated suite, Jamie empowers her clients to transform their supply chains from a source of complexity into a strategic advantage. With over 20 years in senior executive management positions at multinational IT corporations like Accenture, Tech Mahindra, IBM, and Bell, Jamie has developed deep expertise and served as a trusted advisor to her clients on their IT strategies and operations.

"Companies today face significant hurdles such as demand forecasting, inventory management, and streamlining production processes," said Jamie. "My aim is to help my clients optimize their end-to-end supply chain operations, enhance agility and responsiveness to market changes, and drive sustainable business growth for improved efficiency."

As Vice President of EMEA, Wesley drives BlueCherry's growth and presence in the region as an end-to-end solution suite. He supports his clients' global strategic growth by helping them navigate rapidly evolving ESG regulations and manage compliance while ensuring that CGS's BlueCherry solutions are aligned with their regional needs and broader global objectives. Prior, Wesley served as a global sales and marketing director for fashion supply chain IT firm, Coats Digital, and as regional sales director for South Africa for Sage, a British multinational enterprise software company.

"Throughout my career, I've been deeply committed to helping global apparel and retail brands tackle supply chain complexities through advanced automation," said Wesley. "More than any other player in the market, BlueCherry has focused on the specific needs of fashion industry customers; I'm excited to marry my passion for fashion with BlueCherry's mission to make fashion brands more successful."

Digital Twin Consortium Announces the University of Central Florida Research Foundation as a New Member

7 November 2024

The Digital Twin Consortium® (DTC) announced that the University of Central Florida (UCF) Research Foundation has joined DTC. UCF Research Foundation has also agreed to be the Regional Branch Organizer (RBO) for Southeast USA. As an RBO, the UCF Research Foundation will facilitate and drive local DTC engagements and activities with regional industry, government, and academic institutions on behalf of the consortium.

"The overarching goal of this cooperation is to accelerate the development, adoption and monetization of digital twin technology and digital engineering in the digital economy by preventing fragmentation and harmonizing the efforts in pursuit of these mutual objectives," said Soheil Sabri, Ph.D. Sabri, an assistant professor in digital twin at the School of Modeling Simulation and Training and serves as the Academia and Research Working Group co-chair and ambassador for academia and research at the DTC.

"This collaboration represents a significant step forward in leveraging digital twin technology," said Grace Bochenek, Ph.D., director of UCF's Knights Digital Twin Initiative. "By combining our expertise with the DTC, we are poised to advance research, enhance educational opportunities, and drive meaningful innovation in this transformative field."

Joint activities that will propel the digital twin technology forward, include:

- **Standardization Requirements:** Working together to develop and refine standards crucial for the growth and interoperability of digital twin technologies.
- **Training and Education:** Mutual support in the development of training programs and educational initiatives to build a skilled workforce in the digital twin domain.
- **Research and Development:** Joint research efforts focusing on innovative digital twin topics to drive the advancement of technology and its applications.
- **Interoperability:** Harmonizing technology components and related elements to ensure seamless integration and functionality across various platforms.
- **Horizontal and Vertical Domain Alignment:** Coordinating efforts to align work in horizontal domains with adoption in vertical domains, including use cases, proof of concepts, and the Value Innovation Platform Initiative.

"We are excited to have the UCF Research Foundation as the RBO for Southeast USA," said Dan Isaacs, GM and CTO of Digital Twin Consortium. By working together, we are not only enhancing the technology and helping address the workforce skills shortage but also setting the

stage for broader adoption of Digital Twin research and development through a strong base of value-driven impactful, real-world applications.”

DXC Technology and Accelya Partner to Accelerate Airline Innovation and Enhance the Traveler Experience

30 October 2024

DXC Technology, a leading Fortune 500 global technology services partner, and Accelya, a leading global provider of technology solutions to the airline industry, announced they will partner to offer airlines a seamless and modern airport retail experience and accelerate system integrations for airlines globally. This will enable airlines to modernize operations and introduce new innovative offerings for their customers, ultimately enhancing the traveler’s experience.

Accelya will leverage DXC’s proprietary Departure Control Systems (DCS) industry solution for ensuring operational efficiency and enhanced passenger experiences at the airport. This DXC technology enables Accelya’s FLX ONE capabilities, which is part of its new FLX ONE retailing platform. The FLX ONE retailing platform currently generates more than 30 billion offers globally each day and helps airlines manage flight inventory and book seats. With FLX ONE, airlines now have the opportunity to leverage a single platform covering each phase of The International Air Transport Association (IATA) Offers, Orders, Settle & Delivery to offer a modern, personalized and frictionless experience for travelers.

The platform will help airlines seamlessly manage ticketing offers and orders, as well as reservation fulfilment on their own platforms, reducing overhead costs and ultimately growing revenue by enabling more personalized offers and richer, customer-centric retailing capabilities such as personalized offers and enhanced servicing functionality all along the customer journey.

“FLX ONE is a proven, future-ready platform that gives airlines complete control over their retailing — from booking to boarding — delivering a seamless experience,” said Sam Gilliland, CEO of Accelya. “The addition of FLX Delivery, powered by DXC’s airport technology, makes FLX ONE a truly comprehensive OOSD solution and a genuine alternative to legacy systems.”

DXC and Accelya are also partnering to establish DXC as Accelya’s preferred systems integrator. DXC’s deep industry expertise, matched with its ability to execute with precision on large-scale system integrations, will accelerate modernization and drive innovation for the world’s leading airlines.

“DXC partners with the world’s leading airlines to deliver seamless experiences and leverage transformational technology like AI across their business operations,” said Chris Drumgoole, Managing Director for DXC’s Global Infrastructure Services. “Our new partnership with Accelya will bring tremendous value to airlines that want to continue to modernize their systems while elevating the customer experience and increasing return on investment.”

DXC Technology Names James Walker as Chief Administrative Officer

6 November 2024

DXC Technology, a leading Fortune 500 global technology services provider, announced the appointment of James Walker as Chief Administrative Officer. As a key addition to DXC's growing leadership team, Walker will report to DXC's Chief Financial Officer, Rob Del Bene.

In this role, Walker will oversee DXC's global operations and spearhead transformation initiatives to drive growth and operational efficiency. This includes continuing to strengthen the DXC operating model focused on delivering customer excellence. His responsibilities will include enhancing workforce productivity and ensuring clarity and accountability across the company. Additionally, Walker will lead corporate business services, including IT functions.

Walker joins DXC with more than 30 years of experience in technology and financial services. Most recently, he served as Vice President of Economics for IBM Cloud, where he successfully led strategic initiatives focused on cost reduction, automation advancement, and cross-organizational delivery. His career includes senior leadership positions at financial institutions including Bank of America, Morgan Stanley, and Credit Suisse. He holds a Bachelor of Arts degree in Economics from Newcastle University.

DXC's Chief Operating Officer, Jim Brady, will be retiring at the end of this month.

ENGYS Unveils a New Brand Identity to Reflect the Evolution of its CFD Solutions

4 November 2024

ENGYS, the market leader in open-source CFD software solutions for enterprise, announced the launch of its new brand identity. This rebranding reflects the company's evolution and renewed focus on delivering cutting-edge CFD solutions to its global client base.

The rebranding is driven by ENGYS' commitment to innovation and its desire to align its visual identity with the expanded capabilities and strategic vision of the company.

"This rebranding effort goes beyond a mere aesthetic update; it embodies our commitment to delivering innovative, cutting-edge CFD solutions. It also reflects our current evolution and aligns with our vision to lead the market with the best available CFD software.", said Francisco Campos, Director of Operations and co-founder of ENGYS.

The rebranding includes new logos for both the company and software products, a refreshed color palette, and an updated website designed to reflect the maturity the company has achieved over the past 15 years. It will be rolled out across all platforms and communication channels, including the company's website, social media, software products HELYX and ELEMENTS, and marketing materials, creating a unified and recognizable brand image that resonates with customers and stakeholders.

Lisandro Maders, Head of Sales and Marketing at ENGYS, added, "When I joined ENGYS in 2018, I was immediately impressed by the level of our CFD software capabilities. The progress we've made since then have been extraordinary. This rebranding captures the essence of our journey: where we've been, where we're now, and where we're heading to. It stands as a testament to the maturity of our CFD solutions and our vision to continue leading the industry with innovative open-source technologies."

EON Reality Announces Qlick Solutions Ltd. as a New Value Added Reseller in Kenya

6 November 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 a new Value Added Reseller (VAR) partnership with Qlick Solutions Ltd., an industry-leading provider of professional and trusted tech solutions focused on sustainable enterprise operation in Kenya.

With this partnership, Qlick Solutions Ltd. stands at the forefront of EON Reality's worldwide expansion efforts, increasing the availability of state-of-the-art XR knowledge transfer solutions for immersive and experiential learning across Kenya.

Qlick Solutions Ltd., renowned for its pivotal role in digital transformation, drives growth and profitability through technology adoption. Its innovative approach in product development and process automation using disruptive technologies, such as Artificial Intelligence, Augmented Reality, Geospatial Information Systems and mobile communication, cements its position as a regional leader.

Nzau Aaron, Founder & CEO, Qlick Solutions Ltd., says of the partnership, "By officially joining forces with EON Reality, Qlick Solutions Ltd. squares the circle in becoming a leading player in the XR solutions space in Kenya. With the superior technological pedigree of EON Reality, we're set to offer unparalleled XR experiences for businesses, educators, and learners across the region that are safe, reliable, efficient, and scalable."

Dan Lejerskar, Founder of EON Reality, expresses his excitement about the new partnership, "EON Reality's mission of global accessibility and our commitment to make knowledge easily available, accessible, and shareable is significantly bolstered with Qlick Solutions joining us as a VAR. Their impressive positioning in the connectivity and communication domain aligns them perfectly to bridge the XR technology gap experienced by several organizations in Kenya. We're excited to see the transformative impact this synergy will have on a regional scale."

Both EON Reality and Qlick Solutions are eager to bring cutting-edge XR solutions that advance immersive and experiential learning to benefit educational institutions and corporations across Kenya and surrounding regions.

HCLTech announces new AI/Cloud Native Lab in Singapore in partnership with Singapore Economic Development Board

4 November 2024

HCLTech, a leading global technology company, announced the creation of a new Singapore-based AI/Cloud Native Lab. HCLTech's Lab in Singapore will be the company's fifth in its global network, expected to open in 2025.

The Lab, joining others in the US, UK, Germany and India, will be supported by EDB and assist enterprises in the region in accelerating their AI initiatives through HCLTech's comprehensive suite of integrated AI and GenAI offerings, including AI Force and AI Foundry. The Lab in

Singapore will also partner with Nanyang Polytechnic and Singapore Polytechnic to collaborate on transferring knowledge and nurturing young talent and mid-career individuals in AI.

Roshni Nadar Malhotra, Chairperson, HCLTech, made the announcement today at an event with the Ministry of Digital Development and Information of Singapore and the Singapore Economic Development Board (EDB). Senior academic members from Nanyang Polytechnic and Singapore Polytechnic also attended the event.

“Our Labs are a conducive starting point for enterprises that want to embark on a collaborative journey to develop blueprints for AI and GenAI-led efficiencies, new business capabilities, skilling roadmaps and overall organizational competitive advantage with a pragmatic approach,” said Vijay Guntur, Chief Technology Officer and Head of Ecosystems, HCLTech. “We are very excited to add Singapore to our network, which will go a long way in further strengthening Singapore’s position as a regional hub for AI innovation,” he added.

Singapore has made significant strides in helping companies adopt and innovate with AI across sectors including financial services, manufacturing and SMEs. In 2023, the Singapore government launched the Singapore National AI Strategy 2.0, highlighting its commitment to leading global AI innovation. This strategy aims to build a trusted and responsible AI ecosystem.

“DISG has been driving the adoption of AI across key industries and Singapore-based corporates, and HCLTech’s AI Lab supports this mission,” said Mr Philbert Gomez, Executive Director, Digital Industry Singapore (DISG). “We are pleased to partner with HCLTech for the launch of its AI Lab in Singapore, which provides enterprises with the tools to rapidly experiment with and scale AI solutions to unlock new business value from Singapore.”

HCLTech has been operating in Singapore for over four decades, building a strong technology presence and working with many notable clients. Singapore is the hub for HCLTech's Southeast Asia operations and has led technological advancements, including Asia's first Wi-Fi-based patient tracking system and various projects for the Singapore government.

Keysight Announces Leadership Appointments

4 November 2024

Keysight Technologies, Inc. announced the following executive appointments:

- **Steve Yoon**, vice president of the Americas sales region, has been appointed senior vice president of global sales. Yoon succeeds Mark Wallace, who is retiring after more than 35 years with the company.
- **Jason Kary**, vice president, treasurer and investor relations, has been named senior vice president and president of the Electronic Industrial Solutions Group. Kary succeeds Ee Huei Sin, who is retiring after over 30 years with the company.

Satish Dhanasekaran, Keysight’s President and Chief Executive Officer, said: “I am excited to announce the appointment of Steve and Jason, two strong leaders with extensive expertise and experience. They will play a critical role in advancing Keysight’s software-centric solutions strategy and driving long-term value creation. I also want to express my gratitude to Mark and

Huei Sin for their outstanding contributions and leadership. Their accomplished careers have left a lasting impact on Keysight."

Wallace and Ee will support smooth transitions until they retire. Yoon and Kary will report to Dhanasekaran in their new roles.

Leader Biographies

Yoon leads the company's largest sales region, the Americas. Throughout his tenure with the company, he has built a track record of driving above-market growth and cultivating strong relationships internally and externally. Yoon has also held a variety of sales and product management positions and has extensive experience working with customers in the semiconductor, wireless, cloud/data center, automotive, and aerospace defense industries. He earned a bachelor's degree in electrical engineering from the Illinois Institute of Technology.

Kary has served as Keysight's treasurer and head of investor relations since 2014. He is a highly respected leader, both internally and externally, known for his results focus and high performance. With nearly three decades of industry experience, Kary has held multiple finance leadership positions of increasing responsibility during his tenure, spanning wireless communications, electronic industrial, and life sciences markets. Prior to Keysight, he was the group chief financial officer for Agilent's \$1.6B Life Sciences Group. Kary holds an MBA from Carnegie Mellon University and a bachelor's degree from the University of Illinois, Urbana-Champaign.

L&T Technology Services Wins Prestigious Excellence Award from Caterpillar Inc.

29 October 2024

L&T Technology Services Limited, a global leader in engineering, digital and R&D services, announced it has won the Caterpillar Supplier Excellence Award 2024, from Caterpillar Inc. Caterpillar procurement leadership presented the award at their Supplier Excellence Recognition event in Grapevine, Texas on September 19, 2024. With Caterpillar's global presence across multiple industries, this coveted award demonstrates LTTS' excellence in meeting customer commitments in the Mobility and Sustainability segments.

LTTS is a key supplier for Caterpillar Inc., delivering high end engineering services for Caterpillar and its customers across the globe. Leveraging expertise across multiple sectors, LTTS has been a valued partner in supporting Caterpillar's sustainability initiatives.

During the award ceremony, **Pam Heminger, Senior Vice President for the Strategic Procurement and Planning Division** said, *"Caterpillar's ability to manufacture is dependent on the strength, efficiency and effectiveness of the entire supply network, end-to-end. Our customers build a better, more sustainable world when our strong supply network helps ensure we provide our customers the products they need at the right time, the right place and at the right cost."*

"The world is relying on Caterpillar and companies like LTTS to reduce carbon footprint and lower greenhouse gas emissions while setting new benchmarks for Mobility. We are very proud to be recognized as a leader in helping Caterpillar achieve its Sustainability and Mobility goals,

providing products and services that make a real difference in the world,” said **Alind Saxena, Executive Director and President, Mobility & Tech at L&T Technology Services.**

LTIMindtree Awarded ‘Partner of the Year’ for Digital Transformation by Duck Creek

29 October 2024

LTIMindtree, a global technology consulting and digital solutions company, announces that it has been named Partner of the Year for Digital Transformation by Duck Creek Technologies, the intelligent solutions provider defining the future of property and casualty (P&C) and general insurance. The award recognizes LTIMindtree’s commitment to fostering innovation and excellence within the Insurance industry by providing advanced digital solutions.

LTIMindtree has been instrumental in helping Insurers adopt Duck Creek OnDemand solution suite while effectively tackling migration and integration through cutting edge tools like Leapfrog AI, Wingman and Canvas AI in addressing common issues around migration and integration with innovative solutions.

“LTIMindtree has enhanced the transformation process for our clients by offering them efficient tools and methodologies for upgrading, remediating and migrating from older versions of Duck Creek Policy, Billing, and Claims solutions into the evergreen SaaS platform, Duck Creek OnDemand. Their expertise in Conformance Remediation has proven invaluable. Their tools save our clients time and reduce costs during their transition to DCOD,” said Sean Murphy, Senior Vice President, Customer and Partner Enablement, Duck Creek Technologies.

“We are honored to be recognized as Duck Creek’s Partner of the Year for Digital Transformation,” said David Althoff, Senior Vice President & Chief Business Officer, Insurance, LTIMindtree. “This award highlights our dedication to leveraging innovative technologies to solve complex migration and integration issues, ensuring a seamless transition for our clients.”

LTIMindtree has supported a wide range of Duck Creek customers in transitioning to the latest platform by incorporating advanced digital and AI technologies. These initiatives have streamlined the cloud migration and adoption process and resolved key integration challenges, enabling clients to maximize the business benefits of using the Duck Creek OnDemand suite.

PROS Appoints Colleen Langevin as Chief Marketing Officer

7 November 2024

PROS Holdings, Inc., a leading provider of AI-powered SaaS pricing and selling solutions, announced the appointment of Colleen Langevin as Chief Marketing Officer (CMO). Langevin brings more than 20 years of experience in driving go-to-market success for B2B and B2C companies, building strong brands and helping to accelerate revenue growth for private and public technology brands.

As CMO, Langevin will lead PROS global marketing organization and strategy, with a focus on scaling the demand generation engine as well as driving the next phase of digital marketing transformation. These efforts will enhance brand awareness and further propel the company’s

strategic objectives by strengthening customer relationships and attracting new logos to drive impactful revenue growth.

“Colleen’s extensive experience and unique blend of B2B brand and growth marketing skills make her the perfect fit for PROS as we execute to capitalize on the large market opportunity in front of us,” says Todd McNabb, Chief Revenue Officer, PROS. “I am confident that Colleen’s leadership will be instrumental in creating best-in-class programs that fuel our demand engine. We are thrilled to welcome her to the PROS team.”

Before joining PROS, Langevin was the CMO of Quest Software where she led the marketing organization and strategy that drove significant revenue growth while more than doubling enterprise valuation in 18 months. Prior to Quest, she held executive leadership positions with Vista Equity Partners, Dell, CLEAResult and Iron Mountain.

“Thriving in today’s omnichannel market requires the robust, AI-powered solutions that PROS offers. PROS is the partner of choice for companies looking to drive commercial excellence and top-line growth,” says Colleen Langevin, Chief Marketing Officer, PROS.

Qualtrics announces Rachita Sundar as new Chief Financial Officer

4 November 2024

Qualtrics, the leader and creator of the experience management (XM) category, announced the appointment of Rachita Sundar as the company’s new Chief Financial Officer and member of the Executive Leadership Team.

Sundar brings more than two decades of experience at high-growth and industry leading companies to Qualtrics, where she will lead the global finance organization and provide strategic advice and support to help accelerate the company’s next phase of growth. She joins from HubSpot, most recently serving as Senior Vice President, Financial Planning and Analysis (FP&A), and prior to this spent more than a decade in finance leadership roles at Microsoft.

“Rachita is a proven world-class finance leader and operator, and her track record of delivering big strategic impact and growth will be pivotal as organizations around the world invest deeply in improving their customer and employee experiences with Qualtrics,” said Zig Serafin, CEO, Qualtrics. “We’re thrilled to have Rachita help set the course for the exciting future we’re continuing to build for Qualtrics and the experience management category.”

“Throughout my career I’ve sought to join organizations driving significant technological shifts, and I strongly believe experience management and Qualtrics are at the next frontier of this,” Sundar said. “It’s a key reason why I chose to join the company, along with the deep, united commitment everyone I met with demonstrated for our customers, employees, and continued success. The opportunities ahead are limitless.”

Sundar’s appointment is effective immediately, based in Seattle.

Renesas Announces Additional Key Leadership Changes

6 November 2024

To build on the **recent leadership changes announced on October 31, 2024**, Renesas Electronics Corporation, a premier supplier of advanced semiconductor solutions, announced additional updates to its leadership team, effective January 1, 2025. These changes will bring critical skills to key roles, including valuable external perspectives, to sharpen the company's focus and further enhance Renesas' ability to execute the long-term growth strategy.

1. Renesas has recently established the UX organization to build on its strong customer relationship and further enhance customer experience by providing a common interface with customers. The UX Group will also serve as the voice of the customer across the four product groups, as well as the Software & Digitalization Group. This organization will add Renesas' web and marketing functions and system solutions to further enhance the company's customer experience.

Julie Pope, Senior Vice President and Chief Human Resources Officer, has been appointed to lead this organization. In addition to UX, Julie will also be responsible for driving strategic initiatives aimed at driving economies of scale across the business as **Senior Vice President, Strategic Initiatives and UX**. Julie will report directly to CEO Hidetoshi Shibata.

2. Renesas will appoint **Utae Nakanishi** as the company's **Senior Vice President and Chief Human Resources Officer**.

Utae comes to Renesas following a 25-year tenure with the global semiconductor company, Micron Technology, Inc. In her most recent Micron role as Vice President, Global Business Partnering and Talent Management, Utae focused on enabling business success through innovative talent solutions while preparing organizations, leaders and employees to meet the evolving demands of the rapidly growing memory semiconductor industry.

Her global experience includes leading a diverse team in multiple countries across North America, Europe and Asia in her role as VP, Global Business Partnering and People Services. Prior to this, she accepted a key assignment in Japan, where she led the integration of Elpida and Rexchip into Micron as Micron's head of HR in Japan. In her new role, Utae will build on Julie Pope's success by strengthening Human Resources and General Affairs capabilities and systems. She will also foster an innovative and inclusive culture that will drive a high-performance and engaging environment to attract, retain and develop our talent. Utae will report directly to CEO Hidetoshi Shibata.

Please see the attachment for a biography of Utae Nakanishi.

3. **Malini Narayanamoorthi**, Senior Director of Engineering, Analog & Connectivity Group and Country Head of India will be promoted to **India Country Manager and VP, MID Engineering, Analog & Connectivity Group**.

Since joining Renesas in 2023, Malini has played a crucial role in expanding the company's presence in India, including the expansion of Renesas' India engineering design teams, collaborations with universities, including a **partnership with IIT Hyderabad**, and a **joint venture to build a semiconductor packaging facility** in Gujarat

with CG Power and Industrial Solutions Limited and Stars Microelectronics (Thailand) Public Co. Ltd.

Malini will continue to have the dual responsibility of driving the company's strategy in India from both engineering and business fronts. Her focus will include identifying growth opportunities, expanding talent investment, fostering strategic partnerships, and enhancing profitability.

Malini will report directly to CEO Hidetoshi Shibata and Davin Lee. As announced **previously**, Davin will assume the roles of Senior Vice President and General Manager of Analog & Connectivity and Embedded Processing effective January 1, 2025.

Schneider's sustainability program heads full speed toward its end-year targets with strong local impact

30 October 2024

Schneider Electric, the leader in the digital transformation of energy management and automation, announced the latest results of its Schneider Sustainability Impact (SSI) program and its financial results for the third quarter of 2024.

Recently recognized as the World's Most Sustainable Company by TIME and Statista, Schneider Electric's SSI program monitors and measures the company's progress across a range of transformative Environmental, Social and Governance (ESG) targets set for 2025. By tracking its sustainability performance and publishing quarterly results, Schneider Electric keeps the momentum for its 11 global and local ambitions and maintains its industry leadership in corporate social responsibility.

At the end of the quarter, the overall Schneider Electric Sustainability Impact (SSI) score came in at 7.29 out of ten, well on track to reach the 2024 end-year target of 7.40, with two major milestones reached:

- Schneider surpassed its goal of providing access to green and reliable energy to 50 million people more than one year before its end-2025 target. This was achieved through projects where Schneider's solar power solutions were installed on public facilities across Africa and India. For example, in Kenya, Nigeria, and India, new hybrid solar solutions were added to health clinics attended by roughly 2 million people, and, in India, over 700 schools were powered by clean energy benefitting around 120,000 students. Schneider is now focused on further ramping up these efforts so that by 2030, cumulatively, 100 million people will have gained access to green electricity since the start of the program in 2009.
- Schneider also crossed a key threshold in its efforts to foster learning, upskilling, and development for all generations having now trained over 763,000 people in energy management. For example, Schneider Electric and its Foundation recently collaborated with Enactus, enabling university students from ten countries to develop entrepreneurial solutions that address social issues related to the energy transition.

Furthermore, Schneider made considerable strides in halving the carbon impact of its top suppliers through its Zero Carbon Project, resulting in a 36% reduction of their operational CO2 emissions. This was facilitated by several renewable energy workshops held in the USA, Europe, and China, as well as over 20 specialized webinars aimed at supporting suppliers in their decarbonization endeavors.

“Our achievements this quarter showcase the scale of our impact, with local projects playing a pivotal role in achieving our ambitious goals,” said Xavier Denoly, Schneider Electric’s Senior Vice-President of Sustainable Development. “Despite these great results, our work is far from over. We must further intensify our global decarbonization efforts to mitigate the effects of climate change, benefiting people and planet.”

Expanding Renewable Energy Through Strategic Investment

Earlier this year, Schneider Electric signed a groundbreaking Tax Credit Transfer Agreement as part of a strategic partnership with ENGIE North America. This collaboration supports solar and battery storage systems for clean energy projects across Texas. These projects, which have been progressively activated throughout 2024, have propelled Schneider Electric closer to its goal of 100% renewable energy usage in the U.S. and Canada. In recognition of these efforts, Schneider Electric was awarded the 2024 RE100 Changemaker Award during Climate Week NYC for its significant progress toward ambitious renewable energy targets.

Supporting Local Communities through Sustainable Housing and Disaster Relief

Reaffirming its commitment to community-driven impact, Schneider Electric has strengthened its 30+ year partnership with Habitat for Humanity. This year, the collaboration has expanded beyond affordable housing to help homeowners reduce operational costs through energy monitoring, smart products, and education for both Habitat affiliates and homeowners. Schneider Electric will contribute \$3.5 million in cash and product donations this year and provide thousands of employee volunteer hours, all geared toward advancing long-term sustainability in affordable housing.

Schneider Electric’s partnership with Footprint Project, launched in 2021, highlights its dedication to energy equity in disaster relief. This year we will donate \$1 million in cash and products and provide hundreds of volunteer hours. By providing funding and technical volunteers to build solar trailers for rapid deployment in hurricane-affected regions, Schneider Electric empowers local communities with sustainable energy solutions in times of crisis.

Trimble Expands Collaboration with The HALO Trust to Enhance Landmine Clearance Efforts Worldwide

7 November 2024

Trimble has announced its expanded support for The HALO Trust, the world's largest humanitarian landmine-clearance non-profit organization. Trimble is donating an additional 175 Trimble® Catalyst™ GNSS systems, including Trimble DA2 GNSS receivers, to help The HALO Trust further its demining operations across the world. Building on the impact of the ongoing collaboration, Trimble's latest donation will support the expansion and productivity of The

HALO Trust's mine clearance teams. The Catalyst GNSS system provides The HALO Trust with a solution for deploying precise mapping capabilities to large field teams across broad geographic areas. More field teams can now be equipped with the necessary tools to safely and efficiently clear landmines, thereby accelerating the pace of landmine clearance globally.

Since receiving Trimble's product donations and the Trimble Foundation Fund directed grant, The HALO Trust has made remarkable progress in landmine and unexploded ordnance (UXO) clearance. From January to September 2024 alone, The HALO Trust cleared 802 minefields and battlefields, covering a total area of 10,400 acres across 12 war-torn countries. During this period, 31,209 landmines and other Explosive Remnants of War (ERW) were safely destroyed — all accurately mapped using the Trimble Catalyst GNSS system.

The HALO Trust's use of Trimble technology has not only enhanced operational efficiency but also provided critical data for safe land reclamation and development. The accuracy and reliability of Trimble's technology have been pivotal in ensuring the safety and success of demining operations in regions severely impacted by conflict, such as Ukraine, Angola and Sri Lanka.

"We are incredibly grateful for Trimble's continued support," said James Cowan, chief executive of The HALO Trust. "Trimble Catalyst and DA2 GNSS receivers have transformed our ability to map and clear minefields accurately. This new donation will enable us to expand our teams and reach even more affected communities, making a tangible difference in their lives."

"The HALO Trust is making the world a better place," said Emily Saunoi-Sandgren, director of environmental, social and governance (ESG) at Trimble and chair of the Trimble Foundation Fund. "Their dedication to humanitarian efforts aligns perfectly with Trimble's mission of transforming the way the world works. By providing advanced technology solutions, we are enabling The HALO Trust to carry out their life-saving work more effectively."

Members of the HALO Trust team will be [presenting at Trimble Dimensions User Conference 2024](#) on Monday, November 11 to provide attendees with the latest updates on its efforts to clear landmines in post-conflict regions using Trimble technology.

[Wipro, Microsoft and SAP Collaborate to Accelerate RISE with SAP Migration at Near Zero Cost](#)

30 October 2024

Wipro Limited, a leading technology services and consulting company, announced a strategic collaboration with Microsoft and SAP. The initiative is designed to help clients significantly improve the speed and effectiveness of RISE with SAP migrations on the Microsoft Cloud.

Through the collaboration, Wipro will be able to offer clients a strategic roadmap and best practices to fully harness the potential of RISE with SAP, enhancing digital operations, overall efficiency, and improved customer experiences. The joint effort also includes financial incentives that allow clients to achieve a 'Near Zero Cost Migration' on their way to becoming an intelligent enterprise.

“We are excited to announce our pioneering collaboration with Microsoft and SAP,” said **Srinivas Sai Nidadhavolu, Vice President and Global SAP Practice Leader, Wipro Limited**. “By leveraging our industry-leading digital capabilities, together with the expertise of partners, we are well positioned to accelerate our client' transformation into intelligent enterprises, driving them towards sustainable growth.”

As SAP evolves its support strategy on select on-premises systems beyond 2027, organizations are encouraged to transition from SAP S/4HANA to SAP S/4HANA Cloud to help ensure smooth business operations. By leveraging Wipro's digital transformation expertise, Microsoft's robust cloud infrastructure, and combining the power of SAP's industry-leading software and business process redesign services, this collaboration will help facilitate seamless migrations for customers, ensuring continued excellence and innovation in business processes.

“We are pleased to empower our vast partner ecosystem to deliver successful Cloud ERP transformations through RISE with SAP as a proven way to simplify our customers' journey to the cloud while modernizing their legacy ERP,” said **David Robinson, President, Cloud ERP, SAP**. “We encourage our customers who are in a position to benefit from this partnership to learn more from their account teams, and we look forward to accelerating many more successful transformation journeys in the months ahead.”

"Our collaboration with SAP and Wipro, to accelerate RISE with SAP deployments on the Microsoft Cloud, provides customers a scalable and secure solution that delivers the performance needed to drive business transformation," said **Stephen Boyle, Global Leader, GSI, ESI and Advisory Partners, at Microsoft**. “With the Microsoft, SAP, and Wipro offering customers can efficiently and securely migrate ahead of the 2027 SAP deadline ”

Event News

BIM World MUNICH 2024 with CADENAS

5 November 2024

CADENAS will be exhibiting at the leading trade fair for the construction industry on November 26th and 27th

On **November 26 and 27, 2024**, the top representatives of the construction industry will meet in the Bavarian capital: BIM World MUNICH will take place for the eighth time in the International Congress Center Messe München (ICM). CADENAS GmbH will be among the more than 250 international exhibitors on both days. In addition, more than 250 speakers will present best-practice examples and international highlight projects with application-oriented product solutions and industry innovations on eight stages.

CADENAS BIM experts in the foyer at booth 14

The BIM working group of the VDMA (German Engineering Federation) is once again a cooperation partner of BIM World MUNICH. As a member of the VDMA, CADENAS will be present in the **foyer at booth 14**. Visitors will receive information on tender texts as well as 2D and 3D BIM data in one place. You can look forward to exciting presentations by Karsten Spieß,

Wolfgang Nagl and Wolfgang Brenner **starting at 10:00 am**. They are experts on the new international QualityBIM platform.

Visitors will also have the opportunity to design a BIM model at the interactive booth. For manufacturers, our experts will provide tools to identify attractive building projects at an early planning stage. As the new construction sector is currently restrained, there is potential especially in the renovation of existing buildings (use of technical building automation).

We also have tools for specifiers, such as CAD SCOUT 3Dfindit, which can be used to search manufacturers' websites for BIM files. Our experts will be on hand to answer questions and engage with the audience.

Centric Software to Showcase AI-Powered Product Concept to Shelf Retail Solutions at NRF 2025

4 November 2024

Centric Software® is pleased to announce that it will be exhibiting at NRF 2025—Retail's Big Show, the premier event for retail innovation, at the Javits Center in New York City, from January 11 – 15. Centric drives go-to-market innovation and value creation for consumer goods retailers, brands and manufacturers. 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.

As consumers become more discerning and retail assortment (SKU) optimization evolves in real time, companies must adopt cutting-edge, market-driven technologies like artificial intelligence (AI) to maximize margins, enhance efficiency and optimize product offerings, including new product introductions (NPI). Dedicated to serving the consumer goods and retail industries, Centric Software's solutions power end-to-end product go-to-market strategies—from Merchandise Financial Planning (MFP) to product ideation, development, sourcing, pricing, lifecycle management and inventory control.

Centric Software's flagship platform, Centric PLM™, drives impressive results—speeding time to market by as much as 60%, lowering costs by up to 15%, reducing inventory by as much as 30%, increasing gross margins by up to 15%, boosting productivity by as much as 50%, all while promoting sustainability. Recognized several times by the Just Style Excellence Awards, the most recent win announcement states, "Centric PLM particularly stands out in the market as the only Product Lifecycle Management solution capable of managing multi brands, multi categories and multi processes for consumer goods brands, retailers and manufacturers of any size. The solution brings cost savings, reduces time to market and improves efficiencies for thousands of companies around the world."

These impressive results are echoed by Centric's global customer base, who have experienced firsthand the transformative impact of Centric PLM on their operations. Billy Murray, Group VP Enterprise Systems at Abercrombie & Fitch Co. says, "As part of our ongoing digital revolution

at Abercrombie & Fitch Co., we're focused on implementing tools that allow us to get the right products to the right places around the world as efficiently as possible. With that, we're looking forward to partnering with Centric to provide an innovative end-to-end solution to speed time to market and support communication and visibility across multiple global functions."

Geertje Bastiaans, Packaging Development Manager at Aviko, Europe's largest potato products processor says, "Centric PLM will give us the opportunity to improve end-to-end packaging development. The system holds all relevant labeling information for specific regions and channels to ensure quick generation of compliant labeling briefs."

Centric Software is the only company offering exclusive, AI-powered solutions that seamlessly manage the entire retail process—from pre-season planning through in-season execution and replenishment to post-season analysis. Regularly featured by leading industry analysts, including Gartner, Forrester and IDC, Centric Planning™ is an innovative, cloud-native, AI solution delivering end-to-end planning capabilities to maximize retail and wholesale business performance, including SKU optimization, resulting in an up to 110% increase in margins. Centric Pricing & Inventory™, the leading AI-powered tool for price and stock optimization, expertly balances demand and supply throughout a product's lifecycle to drive margins and boost revenues by up to 18%. "Combining Centric PLM, Centric Planning and Centric Pricing & Inventory is essential for a company, because now you have a full end-to-end solution." says Julien Jacotey, Head of Planning & Allocation at Guess Europe.

Centric Visual Boards™ is a visual platform connecting people and systems driving informed decision-making and execution across merchandising, design, buying, product development, sourcing and more. "With Centric Visual Boards, we aim to increase the garment portfolio by 75% to 90% at our Colombian and Mexican factories," says Liliana Díaz, Product Development and Innovation Manager at Permoda.

Nicole Kaluzne, Manager of Design and Merchandising Systems at Eileen Fisher says, "Centric Visual Boards has allowed us to envision and plan the whole line in a more efficient way with the visual tools and ability to make real-time changes immediately accessible across our teams."

Rounding out the suite is Centric Market Intelligence™, is an AI-driven platform giving insights into consumer trends, competitor offers and pricing to boost competitiveness and get closer to the consumer, with an up to 12% increase in average initial price point. Jordan Pious, VP, Neiman Marcus Performance & Growth states, "I see Centric Market Intelligence as a useful tool to streamline how we view and operate the business as it relates to our positioning competitively—from an assortment standpoint, a pricing standpoint, finding those whitespace opportunities and really knowing when and how to react to business trends."

On a recent call, an industry analyst observed, "With the integration of Centric Software's PLM, Planning, Market Intelligence and Visual Boards solutions, there is now a comprehensive offer that captures the wide-ranging needs of users across the entire product lifecycle, from concept to replenishment. The AI-powered market intelligence tools enable retailers to gain insight into consumer behaviors and effectively track market trends."

Centric Software serves 18,000 brands and boasts a 100% go-live rate. Centric solutions are key to optimizing retail strategy, resulting in faster market entry and seamless seasonal transitions. Nearly 15% of new projects this year have integrated multiple Centric solutions, highlighting the undeniable value of seamlessly connecting pre-season and in-season processes.

“We are the leaders in retail technology, with the market responding strongly to our end-to-end platforms.” says Chris Groves, CEO of Centric Software. “Our team is excited to show retailers at NRF 2025 why the AI-powered Centric suite of solutions is unique in the industry. It covers the entire concept-to-replenishment product lifecycle to drive the efficiency that is critical for retail in today’s competitive environment.”

Visit **Booth #6257, Level 3** to meet our industry experts. Learn how to stay in sync with consumers and ahead of varying market conditions. Make an appointment to reserve your time. See you at the show!

Honeywell Announces Participation At Upcoming Investor Conferences

1 November 2024

Honeywell announced its participation at upcoming investor conferences in the fourth quarter.

- Ken West, President and Chief Executive Officer of Honeywell Energy and Sustainability Solutions, will present at the Baird Global Industrials Conference in Chicago, Illinois on Tuesday, November 12, 2024, from 7:20 a.m. - 7:50 a.m. CST (8:20 a.m. - 8:50 a.m. EST).
- Billal Hammoud, President and Chief Executive Officer of Honeywell Building Automation, will present at the Goldman Sachs Industrials and Materials Conference in New York City on Thursday, December 5, 2024, from 8:00 a.m. - 8:35 a.m. EST.
- Vimal Kapur, Chairman and Chief Executive Officer of Honeywell, will attend the Melius Research Conference in New York City on Wednesday, December 11, 2024.

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

Stratasys to Showcase its Groundbreaking GrabCAD IoT Platform at Formnext 2024, Optimizing Additive Manufacturing Productivity

5 November 2024

Stratasys Ltd. will unveil its GrabCAD® IoT Platform at Formnext 2024, a solution designed to transform how customers manage their 3D printing operations and optimize additive manufacturing productivity. Formnext will be held in Frankfurt, November 19-22.

The GrabCAD® IoT Platform is immediately available to Stratasys customers with GrabCAD® Streamline Pro™ workgroup software, with new PolyJet J3/J5 Series™ printers and from

Stratasys Customer Support. The solution is planned to be rolled out to other technologies in the future.

The new GrabCAD IoT Platform delivers rich new standards-based IoT-enabled capabilities that digitally transform customer interactions with Stratasys' suite of 3D printers, software, and services.

Key features in GrabCAD Streamline Pro enabled by the GrabCAD IoT Platform include:

- In GrabCAD Streamline Pro, the GrabCAD® IoT Platform introduces Stratasys' next generation printer connectivity to provide comprehensive real-time data collection and monitoring to optimize operational efficiency.
- The GrabCAD® IoT Platform enhances Stratasys Customer Support capabilities through powerful remote diagnostics and monitoring features. This connectivity enables support teams to quickly analyze printer data and conduct remote troubleshooting, significantly reducing resolution times and minimizing printer downtime.
- Real-time Data and Monitoring: Customers can access real-time data with GrabCAD® Streamline Pro™ on their printer fleet, enabling support engineers to address issues before they disrupt production.
- Data-driven Insights: The platform integrates technologies that allow operators to make data-driven decisions, ensuring quicker problem resolution and enhanced uptime. This preventative maintenance capability creates opportunities to address issues before they happen.
- Comprehensive Fleet Management: The GrabCAD IoT Platform provides a new standards-based approach (MTConnect) that allows customers to monitor and manage all Stratasys printers within their connected and digital manufacturing environment, resulting in better connectivity and remote diagnostics.

"The GrabCAD IoT Platform with GrabCAD Streamline Pro, or even standalone with Stratasys Customer Support, represents a significant leap forward in our digital transformation journey," said Rich Garrity, Chief Commercial Business Officer at Stratasys. "Using a single standards-based IoT platform for all Stratasys printers rather than multiple bespoke printer technology specific IoT solutions, we're not just improving individual printer performance – we're transforming how our customers interact with and benefit from their entire Stratasys ecosystem."

The launch of the GrabCAD IoT Platform in GrabCAD Streamline Pro and standalone for connected service from Stratasys Customer Support comes as the additive manufacturing industry continues to embrace digital transformation. Stratasys has been at the forefront of this shift offering connected Industry 4.0 solutions for over 15 years, helping its customers leverage IoT and integrate AI to enhance their operations. The platform is a testament to Stratasys' dedication to advancing the state of the art of what is possible in additive manufacturing.

For more information about the GrabCAD Streamline Pro and Stratasys Customer Support powered by the GrabCAD IoT Platform, visit www.stratasys.com. Attendees at Formnext are invited to learn more at the Stratasys booth (Hall 12.1, Booth D121).

Financial News

Trimble Announces Third Quarter 2024 Results

6 November 2024

Trimble Inc. announced financial results for the third quarter of 2024.

Third Quarter 2024 Financial Highlights

- Revenue of \$875.8 million, down 9 percent on a year-over-year basis, up 3 percent on an organic basis
- Annualized recurring revenue ("ARR") was \$2.19 billion, up 13 percent year-over-year, up 14 percent on an organic basis
- GAAP operating income was \$116.4 million, 13.3 percent of revenue and non-GAAP operating income was \$224.8 million, 25.7 percent of revenue
- GAAP net income was \$40.6 million and non-GAAP net income was \$171.9 million
- Diluted earnings per share ("EPS") was \$0.16 on a GAAP basis and \$0.70 on a non-GAAP basis
- Adjusted EBITDA was \$237.4 million, 27.1 percent of revenue

Executive Quote

"The Trimble team executed well in the quarter, exceeding expectations on both top and bottom lines, while delivering a record \$2.19 billion of ARR and record gross margin of 68.5 percent," said Rob Painter, Trimble's President and Chief Executive Officer. "We continue to progress our Connect & Scale strategy with the recently announced Mobility divestiture, which will further simplify and focus our business. We look forward to hosting our Dimensions user conference from November 11-13, 2024 and our investor day on December 10, 2024."

Forward-Looking Guidance

For the full-year 2024, Trimble expects to report revenue between \$3,625 million and \$3,665 million, GAAP earnings per share of \$6.25 to \$6.32, and non-GAAP earnings per share of \$2.79 to \$2.87. GAAP guidance assumes a tax rate of 24.9 percent and non-GAAP guidance assumes a tax rate of 17.3 percent. Both GAAP and non-GAAP earnings per share assume approximately 247 million shares outstanding.

For the fourth quarter of 2024, Trimble expects to report revenue between \$925 million and \$965 million, GAAP earnings per share of \$0.52 to \$0.61, and non-GAAP earnings per share of \$0.83 to \$0.91. GAAP guidance assumes a tax rate of 13.0 percent and non-GAAP guidance

assumes a tax rate of 17.4 percent. Both GAAP and non-GAAP earnings per share assume approximately 247 million shares outstanding.

Full-year 2024 and fourth quarter of 2024 guidance both reflect the closing of the joint venture with AGCO which closed at the beginning of the second quarter of 2024. A reconciliation of the non-GAAP measures to the most directly comparable GAAP measures and other information relating to these non-GAAP measures are included in the supplemental reconciliation schedule attached.

Investor Conference Call / Webcast Details

Trimble will hold a conference call on November 6, 2024 at 8:00 a.m. ET to review its third quarter of 2024 results. An accompanying slide presentation will be made available on the "Investors" section of the Trimble website, www.trimble.com, under the subheading "Events & Presentations." The call will be broadcast live on the web at <http://investor.trimble.com>. Investors without internet access may dial into the call at (888) 660-6347 (U.S.) or (929) 201-6594 (international). The conference ID is 1043223. The replay will also be available on the web at the address above.

Aspen Technology Announces Financial Results for the First Quarter of Fiscal 2025

4 November 2024

Aspen Technology, Inc. ("AspenTech" or the "Company"), a global leader in industrial software, announced financial results for its first quarter in fiscal 2025, ended September 30, 2024.

Antonio Pietri, President and Chief Executive Officer of AspenTech, commented, "AspenTech continues to perform well amid ongoing macro uncertainty, delivering solid results to start fiscal 2025. We continue to see strong customer demand for our products and solutions to support their operational excellence and sustainability initiatives. The resilience of our ACV growth is a great indication of the mission-criticality of AspenTech's technology to our customers."

Pietri continued, "At our recent investor day, we laid out a compelling strategy that underscored how we believe AspenTech is poised to benefit from global investments in decarbonization, electrification, and the transition to a new energy system. Looking ahead, we are confident in our ability to deliver consistent high-single to double-digit ACV growth while meaningfully expanding our ACV margin to our Target Operating Model of 45-47% in the coming years. Today's announcement of our anticipated acquisition of Open Grid Systems is in support of the strategy outlined and expands our suite of products and solutions for the utilities industry."

First Quarter Fiscal Year 2025 and Recent Business Highlights

- Annual contract value¹ ("ACV") was \$941.4 million for the first quarter of fiscal 2025, increasing 9.4% year over year and 0.9% quarter over quarter.
- Cash flow used in operations was \$4.4 million for the first quarter of fiscal 2025. Free cash flow was negative \$6.4 million for the first quarter of fiscal 2025. A reconciliation of

GAAP to non-GAAP results is presented in the financial tables included in this press release.

- AspenTech announced today in a separate press release that it has entered into a definitive agreement to acquire Open Grid Systems Limited (“Open Grid Systems”), a global provider of network model management technology and a pioneer in developing model-driven applications supporting open access to data through industry standards. This acquisition will further enhance AspenTech’s Digital Grid Management (“DGM”) suite to support utilities in effectively managing grid complexity while also ensuring resiliency.

First Quarter Fiscal Year 2025 Financial Results Summary

AspenTech’s total revenue was \$215.9 million in the first quarter of fiscal 2025, compared to \$249.3 million in the first quarter of fiscal 2024. Total revenue in the period included license and solutions revenue of \$101.7 million, compared to \$148.6 million in the first quarter of fiscal 2024, maintenance revenue of \$90.7 million, compared to \$85.0 million in the first quarter of fiscal 2024, and services and other revenue of \$23.5 million, compared to \$15.7 million in the first quarter of fiscal 2024. Bookings² was \$151.4 million in the first quarter of fiscal 2025, compared to \$211.8 million in the first quarter of fiscal 2024. The year-over-year differences related to bookings and total revenue were in line with the Company’s expectations and driven by the timing of contract renewals and a higher concentration of attrition in the first quarter of fiscal 2025 relative to the full fiscal year.

Loss from operations was \$96.0 million in the first quarter of fiscal 2025, compared to a loss of \$60.2 million in the first quarter of fiscal 2024. Non-GAAP income from operations was \$48.6 million in the first quarter of fiscal 2025, compared to \$77.8 million in the first quarter of fiscal 2024. Net loss was \$60.5 million, or \$0.96 per diluted share, in the first quarter of fiscal 2025, compared to \$34.5 million, or \$0.54 per diluted share, in the first quarter of fiscal 2024. Non-GAAP net income was \$53.9 million, or \$0.85 per diluted share, in the first quarter of fiscal 2025, compared to \$74.9 million, or \$1.16 per diluted share, in the first quarter of fiscal 2024.

AspenTech had cash and cash equivalents of \$221.1 million as of September 30, 2024, compared to \$237.0 million as of June 30, 2024. The decrease in cash and cash equivalents during this period was primarily due to the impact of share repurchase activity under the Company’s fiscal 2025 share repurchase authorization (the “Fiscal 2025 Share Repurchase Authorization”). Under its revolving credit facility, AspenTech had no borrowings and \$194.5 million available as of September 30, 2024.

Cash flow used in operations was \$4.4 million and free cash flow was negative \$6.4 million in the first quarter of fiscal 2025, compared to cash flow from operations of \$17.0 million and free cash flow of \$16.0 million in the first quarter of fiscal 2024. The year-over-year differences in operating cash flow and free cash flow were due to one-time charges related to the Company’s workforce reduction and Russia exit as well as the timing of collections in the first quarter of fiscal 2025.

Recent Developments

Open Grid Systems Acquisition

AspenTech today announced in a separate press release that it has entered into a definitive agreement to acquire Open Grid Systems. With this acquisition, AspenTech's DGM suite will offer utilities a comprehensive, fully integrated network model management solution to address the acceleration of new grid assets, such as renewable generation, with increased flexibility to manage and scale network model data both inside and outside the control room. Open Grid Systems has a long history of participation in International Electrotechnical Commission ("IEC") standards groups and collaborating with experts around the world to develop and promote the adoption of standards throughout the electrical industry. The transaction is subject to receipt of customary regulatory approvals and is expected to close during the second quarter of fiscal 2025.

Fiscal 2025 Share Repurchase Authorization Update

AspenTech repurchased 92,819 shares for approximately \$20.5 million under the Company's Fiscal 2025 Share Repurchase Authorization during the first quarter of fiscal 2025. The total value remaining under this authorization was approximately \$79.5 million as of September 30, 2024.

Investor Day

AspenTech held its 2024 Investor Day on September 17, 2024. As part of the event, the Company provided a multi-year financial outlook and value creation framework to drive ACV1 growth, expand margins, and execute disciplined capital allocation. A replay of the event webcast and presentation materials are available for a limited time on the Webcasts and Events section of AspenTech's IR website at <https://ir.aspentech.com/events-presentations/webcasts-and-events>.

Fiscal Year 2025 Business Outlook

Based on information as of today, November 4, 2024, AspenTech is reaffirming its fiscal 2025 guidance. Please note that the Company's fiscal 2025 ACV1 growth guidance is based on an ACV1 balance of \$932.9 million as of June 30, 2024.

- ACV1 growth of ~9.0% year-over-year
- GAAP operating cash flow of ~\$357 million
- Free cash flow of ~\$340 million
- Total bookings² of ~\$1.17 billion
- Total revenue of ~\$1.19 billion
- GAAP total expense of ~\$1.21 billion
- Non-GAAP total expense of ~\$675 million
- GAAP operating loss of ~\$24 million
- Non-GAAP operating income of ~\$514 million

- GAAP net income of ~\$52 million
- Non-GAAP net income of ~\$478 million
- GAAP net income per share of ~\$0.82
- Non-GAAP net income per share of ~\$7.52

These statements are forward-looking and actual results may differ materially. Refer to the Forward-Looking Statements safe harbor below for information on the factors that could cause AspenTech's actual results to differ materially from these forward-looking statements.

Conference Call and Webcast

AspenTech will host a conference call and webcast presentation on Monday, November 4, 2024, at 4:30 p.m. ET to discuss its financial results, business outlook, and related corporate and financial matters. A live webcast of the call will be available on AspenTech's Investor Relations website, <http://ir.aspentech.com>, via its "Webcasts" page. To access the call by phone, please use the registration link. To avoid delays, we encourage participants to dial into the conference call fifteen minutes ahead of the scheduled start time. A replay of the webcast also will be available for a limited time at <http://ir.aspentech.com/>.

AspenTech has provided an earnings presentation for its first quarter of fiscal 2025. AspenTech asks that shareholders refer to this presentation in conjunction with the conference call, which can be found at ir.aspentech.com.

Footnotes

1. ACV is the estimate of the annual value of the Company's portfolio of term license and software maintenance and support, or SMS, contracts, the annual value of SMS agreements purchased with perpetual licenses and the annual value of standalone SMS agreements purchased with certain legacy term license agreements, which have become an immaterial part of the Company's business. All ACV numbers presented in this press release exclude ACV associated with the Company's Russia business for all periods presented.
2. Bookings is the total value of customer term license and perpetual license SMS contracts signed and delivered in the current period, less the value of such contracts signed in the current period where the initial licenses and SMS agreements are not yet deemed delivered, plus the term license contracts and perpetual license SMS contracts signed in a previous period for which the initial licenses are deemed delivered in the current period

Autodesk extends invitation to join financial results conference call

4 November 2024

Autodesk, Inc. announced it will share its third quarter fiscal 2025 financial results conference call via its website on Tuesday, November 26, 2024, at 2 p.m. Pacific Time. Join the live webcast call here: autodesk.com/investors. An audio replay of the webcast will be available after 5 p.m. PT at autodesk.com/investors.

More information will be available on autodesk.com/investors.

In the first nine months, CENIT recorded a significant year-on-year increase in consolidated sales of around 13.6% to EUR 151,433 k

5 November 2024

In the third quarter of 2024 CENIT continues its strong performance seen in the first half-year of 2024 and remains on its growth path. After nine months, CENIT Group has generated sales revenues of EUR 151,433 k (previous year: EUR 133,305 k/+13.6%). Sales of third-party software increased by 12.0% to EUR 75,700 k (previous year: EUR 67,607 k). Sales of CENIT's own software increased significantly from EUR 11,605 k to EUR 13,633 k (+17.5%). Sales revenues in the CENIT consulting and services segment increased by 15.3% to EUR 61,983 k (previous year: EUR 53,757 k).

Gross profit (operating performance less cost of materials) amounted to EUR 88,838 k (previous year: EUR 78,970 k) and thus increased by 12.5%. CENIT achieved EBITDA of EUR 10,413 k (previous year: EUR 9,471 k/9.9%) and EBIT of EUR 3,966 k (previous year: EUR 4,599 k/-13.8%). The adjusted EBITDA totaled EUR 11.11 million (previous year: EUR 8.82 million/+26.0%) and the adjusted EBIT was EUR 4.67 million (previous year: EUR 3.95 million/+18.2%). Earnings per share amounted to Cent 11.1 (previous year: Cent 28.6).

Asset and Financial Situation

As of the balance sheet date, equity amounted to EUR 49,770 k (Dec. 31, 2023: EUR 45,003 k). The equity ratio amounted to 32.4% (Dec. 31, 2023: 29.3%). Bank balances, cash and cash equivalents amounted to EUR 12,180 k as of the balance sheet date (Dec. 31, 2023: EUR 24,341 k). Operating cash flow totaled EUR 9,905 k (previous year: EUR 8,500 k), mainly due to the change in working capital.

Employees

As of September 30, 2024, the number of employees in the Group was 1,002 (Dec. 31, 2023: 893). Personnel expenses amounted to EUR 64,252 k in the CENIT Group in the reporting period (previous year: EUR 58,198 k).

Outlook

For the current year, our changed outlook for the CENIT Group is to reach a revenue of around EUR 205,000 - 210,000 k and earnings (EBIT) of around EUR 8,000 - 8,500 k. The company has launched an inside information for the adjustment of the guidance on October 31, 2024.

Modelon welcomes investors to Presentation of Q3 Interim report on Wednesday, November 7, 2024, at 10.00 am

5 November 2024

Modelon, a leading player in the simulation and analysis market that offers software products and complementary consulting services in industrial mathematical modeling, simulation and analysis of complex technical systems, invites investors to a presentation of the interim report for the period Jan – September 2024.

CEO Jan Häglund together with CFO Jonas Eborn, will present the company on a webcast at 10.00 am CET on November 7, 2024. The presentation will be held in English and will be available at www.modelon.com. The live presentation as well as a recording will be available via the link below:

<https://www.redeye.se/events/1043799/live-q-modelon-2>

Xometry Reports Third Quarter 2024 Results

5 November 2024

Xometry, Inc., the global AI-powered marketplace connecting enterprise buyers with suppliers of manufacturing services, reported financial results for the third quarter ended September 30, 2024.

“Q3 2024 represented another record-setting quarter for our company. Powered by our AI-driven marketplace, we achieved record revenues, record gross profit and record marketplace gross margin while capturing additional market share globally,” said Randy Altschuler, Xometry’s CEO. “We delivered better-than-expected results driven by strong 24% marketplace growth. The combination of our team’s strong execution, rapidly growing networks of buyers and suppliers, data-driven AI, and expanding enterprise relationships will continue to fuel strong revenue and gross profit growth.”

“We delivered another quarter of strong marketplace revenue growth and operating leverage demonstrating the value that we bring to global buyers and suppliers,” said James Miln, Xometry’s CFO. “Q3 Adjusted EBITDA loss improved 85% year-over-year driven by a 250 basis point increase in marketplace gross margin and operating efficiencies.”

Third Quarter 2024 Financial Highlights

- Marketplace revenue for the third quarter of 2024 was \$127 million, an increase of 24% year-over-year.
- Marketplace Active Buyers increased 24% from 52,382 as of September 30, 2023 to 64,851 as of September 30, 2024.
- Marketplace Accounts with Last Twelve-Months Spend of at least \$50,000 increased 23% from 1,223 as of September 30, 2023 to 1,506 as of September 30, 2024.
- Supplier services revenue for the third quarter of 2024 was \$14.7 million, a decrease of 10% year-over-year driven primarily by the exit of non-core supplier services and to a lesser extent advertising and marketing services.
- Net loss attributable to common stockholders was \$10.2 million for the quarter, a decrease of \$1.8 million year-over-year. Net loss for the third quarter of 2024 included \$7.0 million of stock-based compensation, \$0.1 million of payroll tax expense related to stock-based compensation and \$3.2 million of depreciation and amortization expense.
- Adjusted EBITDA was a loss of \$0.6 million for the third quarter of 2024, reflecting an improvement of \$3.6 million year-over-year.

- Non-GAAP net income was \$1.1 million for the third quarter of 2024, as compared to a Non-GAAP net loss of \$2.6 million in the third quarter of 2023.

Third Quarter 2024 Business Highlights

- Expanded our US marketplace menu with instant pricing and lead time offerings for tube cutting and tube bending. Through our partnership with Google Cloud, Xometry is leveraging Vertex AI to accelerate the deployment of new auto-quote methods and models on our marketplace.
- Launched a suite of tools on the European marketplace that makes it easier for enterprise customers to order parts for their high-volume manufacturing projects. The tools give engineers, designers, procurement professionals and project managers everything they need to coordinate, collaborate and manage complex orders. Xometry Europe added the Hungarian (Magyar) language to its marketplace. Worldwide, the Xometry marketplace is available in 16 languages.
- Continued the rapid expansion of the company’s global supplier base, with more than 4,200 Active Suppliers, as compared with 1,410 since the beginning of 2021. In Q3, we expanded our supplier base in the U.S. with a focus on adding new suppliers with key quality certifications to serve the needs of our larger customers across key industries.
- Appointed Roy Azevedo to Xometry's Board of Directors on Oct. 15, 2024. Azevedo is the former president for two of Raytheon Technologies’ business units and brings significant expertise in engineering, global manufacturing and supply chain management to Xometry.

Financial Guidance and Outlook:

	Q4 2024	
	(in millions)	
	Low	High
Revenue	\$ 145	\$ 147

- Expect to be slightly Adjusted EBITDA profitable in Q4 2024.

Xometry’s fourth quarter 2024 financial outlook is based on a number of assumptions that are subject to change and many of which are outside of its control. If actual results vary from these assumptions, Xometry’s expectations may change. There can be no assurance that Xometry will achieve these results.

Reconciliation of Adjusted EBITDA on a forward-looking basis to net loss, the most directly comparable GAAP measure, is not available without unreasonable efforts due to the high variability and complexity and low visibility with respect to the charges excluded from this non-

GAAP measure; in particular, the effects of stock-based compensation expense specific to equity compensation awards that are directly impacted by unpredictable fluctuations in Xometry's stock price. Xometry expects the variability of the above charges to have a significant, and potentially unpredictable, impact on its future GAAP financial results.

Conference Call and Webcast Information

The Company will host a conference call and webcast to discuss the results at 8:30 a.m. ET (5:30 a.m. PT) on November 5, 2024. In addition to its press release announcing its third quarter 2024 financial results, Xometry will release an earnings presentation, which will be available on its investor website at investors.xometry.com.

Xometry, Inc. Third Quarter 2024 Earnings Presentation and Conference Call

- Tuesday, November 5, 2024
- 8:30 a.m. Eastern / 5:30 a.m. Pacific
- To access the webcast use the following link: <https://register.vevent.com/register>
- You may also visit the Xometry Investor Relations Homepage at investors.xometry.com to listen to a live webcast of the call

Bechtle shows international growth in third quarter

8 November 2024

Bechtle AG's business development remained under pressure in the third quarter against an ongoing tough economic backdrop. Regionally, the picture varies with the Bechtle Group's most important markets—Germany and France—continuing to be dominated by uncertainty and a reluctance to invest, particularly in the B2B segment. In other European countries, however, Bechtle enjoyed considerable organic growth. Overall, business volume was slightly below the previous year at -1.1 per cent, but revenue went up 2.2 per cent to €1,511.3 m. At €78.6 m, earnings before taxes (EBT) were significantly below the previous year's €93.9 m. The EBT margin also declined from a very good 6.3 per cent to 5.2 per cent. On 30 September 2024, Bechtle employed 15,608 staff, which is 768 people more year-on-year.

Domestic business volume shrank by 8 per cent in the third quarter due to a large-volume software project that had a very positive impact on Q3 2023, which could not be repeated this year. By contrast, Bechtle was able to boost its international business volume by a very satisfactory 10.7 per cent and organic growth stood at an impressive 8.8 per cent. Bechtle's subsidiaries in Austria and Switzerland, Belgium and the United Kingdom in particular developed very positively. "Overall, we are not satisfied with the third-quarter business development. Our SME customers—especially in our most important markets, France and Germany—remain reluctant to invest, but we are delighted by the growth exhibited by our international companies, which is further confirmation that our European M&A strategy is the right course to take," says Dr Thomas Olemotz, CEO, Bechtle AG.

Cost pressure weighs down earnings

Earnings before taxes totalled €78.6 m and were therefore unable to maintain the previous year’s very high level. While the material costs developed at a disproportionately lower rate than revenue, a decrease in other operating income and the rise in personnel costs as a result of acquisitions and higher depreciation and amortisation had a negative impact.

Operating cash flow demonstrates financial strength

Bechtle’s operating cash flow once again developed very positively, totalling €289.4 m in the first nine months of 2024 (previous year: €190.2 m)—an improvement of some €100 m. The decrease in trade receivables and inventories remained at a consistently high level while the smaller reduction in trade payables also had a positive effect during the reporting period. At €196.0 m, free cash flow was also considerably up on the previous year’s €28.9 m.

Moderate increase in headcount

On 30 September 2024, the number of employees across the 120 European locations had gone up by 5.2 per cent, or 768 people, some 70 per cent of whom joined Bechtle as a result of acquisitions. Without these acquisitions, growth would have been just 1.6 per cent.

Another vocational training milestone

Bechtle has been training young people for close to 40 years with the aim of compensating for a strained labour market by promoting young talents from within its own ranks. The beginning of the academic year in September 2024 saw 286 vocational trainees and university students starting their careers at Bechtle, meaning a total of 890 young people were in training at the company on 30 September 2024—more than ever before.

Confidence remains

Many SME customers remained reluctant to invest in upgrading their traditional IT infrastructures in the third quarter. As a result of the continuing adverse economic conditions and high levels of uncertainty regarding future developments, the Executive Board withdrew its annual forecast, which had previously been revised in July. “In light of earnings development so far this year, coupled with the continuing adverse economic conditions in the third quarter, we no longer expect to achieve the adjusted forecast. We do, however, still foresee an improvement in business development in the fourth quarter of 2024 backed by our B2G customers,” says Dr Thomas Olemotz.

Bechtle KPIs for the third quarter and first nine months of 2024

		Q3/2024	Q3/2023	+/-	9M/2024	9M/2023
Business volume	€k	1,889,607	1,911,470	-1.1%	5,672,112	5,613,066
Revenue	€k	1,511,255	1,479,155	+2.2%	4,489,486	4,527,599

Germany	€k	913,651	914,638	-0.1%	2,664,320	2,770,185
International	€k	597,604	564,517	+5.9%	1,825,166	1,757,414
IT SH & MS	€k	959,271	941,738 ¹	+1.9%	2,811,127	2,856,920 ¹
IT E-commerce	€k	551,984	537,417 ¹	+2.7%	1,678,359	1,670,679 ¹
EBIT	€k	80,749	96,402	-16.2%	249,582	273,491
IT SH & MS	€k	58,324	66,723 ¹	-12.6%	163,449	189,709 ¹
IT E-commerce	€k	22,425	29,679 ¹	-24.4%	86,133	83,782 ¹
EBIT margin	%	5.3	6.5		5.6	6.0
EBT	€k	78,550	93,878	-16.3%	244,344	267,357
EBT margin	%	5.2	6.3		5.4	5.9
Earnings after taxes	€k	55,946	66,758	-16.2%	174,143	189,620
Earnings per share	€	0.44	0.53	-16.0%	1.38	1.50
Operating cash flow	€k	148,264	125,259	+18.4%	289,439	190,237
Employees (as of 30/09)		15,608	14,840	+5.2%		

¹ Figures adjusted

		30/09/2024	31/12/2023	+/-
Liquidity ²	€k	520,658	465,756	+11.8%
Equity ratio	%	48.0	45.8	

² Including time deposits and securities

The quarterly statement for the third quarter 2024 is available for download at bechtel.com/reports.

DXC Technology Reports Second Quarter Fiscal Year 2025 Results

7 November 2024

DXC Technology reported results for the second quarter of fiscal year 2025.

"I am pleased to report another quarter of solid results, with adjusted EBIT margin and non-GAAP diluted EPS exceeding our guidance, and revenue coming in toward the high end of our range," said DXC Technology President and CEO, Raul Fernandez. "I'm proud of how our new leadership team has come together and the early momentum we've seen from our initiatives this year. While there's more work ahead, particularly in our go-to-market initiatives, we're focused on execution and building a solid foundation to support stronger performance going forward."

Financial Highlights - Second Quarter Fiscal Year 2025

- Total revenue was \$3.24 billion, down 5.7% year-over-year (down 5.6% on an organic basis). ⁽¹⁾
- EBIT was \$111 million, down 27.5% year-over-year with a corresponding margin of 3.4%. Adjusted EBIT ⁽⁴⁾ was \$279 million, up 11.2% year-over-year, with a corresponding margin ⁽⁴⁾ of 8.6%.
- Diluted earnings per share was \$0.23, down 53.1% year-over-year. Non-GAAP diluted earnings per share ⁽²⁾ was \$0.93, up 32.9% year-over-year.
- Cash generated from operations was \$195 million, down 21.4% year-over-year. Free cash flow ⁽³⁾ was \$48 million in the second quarter of fiscal year 2025, as compared to \$91 million in the second quarter of fiscal year 2024.
- Book to Bill ratio was 0.81x, flat year-over-year.

Segment Highlights - Second Quarter Fiscal Year 2025

Global Business Services ("GBS")

- Revenue was \$1.68 billion, down 1.9% year-over-year (down 1.6% on an organic basis) ⁽¹⁾
- Segment profit was \$214 million, up 0.5% year-over-year, with a corresponding margin of 12.8%
- Book to Bill ratio of 0.90x, compared to 0.76x during the second quarter of fiscal 2024

Global Infrastructure Services ("GIS")

- Revenue from GIS was \$1.56 billion, down 9.4% year-over-year (down 9.6% on an organic basis) ⁽¹⁾
- Segment profit was \$129 million, up 27.7% year-over-year, with a corresponding margin of 8.2%
- Book to Bill ratio of 0.71x, compared to 0.87x during the second quarter of fiscal 2024

Full Year Fiscal 2025 and Third Quarter Fiscal Year 2025 Guidance

Full Year Fiscal 2025

- Total revenue in the range of \$12.9 billion and \$13.1 billion, a decline of 5.5% to 4.5% on an organic basis ⁽¹⁾ compared to the prior guidance of a decline of 6.0% to 4.0%
- Adjusted EBIT margin ⁽⁴⁾ between 7.0% to 7.5%, compared to the prior guidance of 6.5% to 7.0%
- Non-GAAP diluted EPS ⁽²⁾ in the range of \$3.00 to \$3.25, compared to the prior guidance of \$2.75 to \$3.00
- Free Cash Flow ⁽³⁾ of approximately \$550 million, up from the prior guidance of approximately \$450 million

Third Quarter Fiscal 2025

- Total revenue in the range of \$3.2 billion and \$3.3 billion, a decline of 5.5% to 4.5% year-over-year on an organic basis ⁽¹⁾
- Adjusted EBIT margin ⁽⁴⁾ between 7.0% to 7.5%
- Non-GAAP Diluted EPS ⁽²⁾ in the range of \$0.75 to \$0.80

⁽¹⁾ Revenue growth on an organic basis is a non-GAAP measure and is calculated by restating current-period adjusted for the impact of acquisitions and divestitures. A reconciliation of GAAP to non-GAAP measure a

⁽²⁾ Non-GAAP diluted earnings per share is a non-GAAP measure. A reconciliation of GAAP diluted earnings p

⁽³⁾ Free cash flow is a non-GAAP measure. Free cash flow is calculated by subtracting capital expenditures (P Transformation Contract Costs and Software Purchased or Developed) from cash flow from operations. Fr subtracting capital expenditures of \$147 million from cash flow from operations of \$195 million. Free cash subtracting capital expenditures of \$157 million from cash flow from operations of \$248 million.

(4) Adjusted EBIT and Adjusted EBIT margin are non-GAAP measures. Reconciliations of GAAP Net Income to

Earnings Conference Call and Webcast

DXC Technology senior management will host a conference call and webcast to discuss second quarter fiscal 2025 results at 5:00 p.m. ET November 7, 2024. The dial-in number for domestic callers is 888-330-2455. Callers who reside outside of the United States should dial +1-240-789-2717. The passcode for all participants is 4164760#. The webcast audio and any presentation slides will be available through a link posted on DXC Technology's Investor Relations website.

A replay of the conference call will be available approximately two hours after the conclusion of the call until 11:59 PM ET on November 14, 2024, at 800-770-2030 for domestic callers and at +1-647-362-9199 for international callers. The replay passcode is 4164760#. A transcript of the conference call will be posted on DXC Technology's Investor Relations website.

Markforged Announces Third Quarter 2024 Results

7 November 2024

Markforged Holding Corporation (the "Company" or "Markforged"), the company strengthening manufacturing resiliency by enabling industrial production at the point of need, announced its financial results for the third quarter ended September 30, 2024.

Third Quarter 2024 Financial Results Compared To Third Quarter 2023

- Revenue was \$20.5 million compared to \$20.1 million.
- Gross margin was 49.0% compared to 45.7%.
- Non-GAAP gross margin was 50.9% compared to 46.9%.
- Operating expenses were \$27.6 million compared to \$59.6 million.
- Non-GAAP operating expenses were \$20.5 million compared to \$24.9 million.
- Net loss was \$23.4 million compared to net loss of \$51.4 million.
- Non-GAAP net loss was \$9.5 million compared to a loss of \$13.8 million.
- Cash and cash equivalents, including restricted cash, were \$79.5 million as of September 30, 2024, compared to \$93.9 million as of June 30 2024. The balance sheet for the quarter ended September 30, 2024 includes restricted cash in the amount of \$19.4 million relating to the surety bond entered into following the jury verdict in Continuous Composites litigation. The surety bond was terminated as of October 30, 2024 in connection with the settlement of the Continuous Composites litigation announced on September 23, 2024.

Reconciliations of the non-GAAP financial measures provided in this press release to their most directly comparable GAAP financial measures are provided in the financial tables included at the end of this press release. An explanation of these measures and how they are calculated is also included below under the heading "Non-GAAP Financial Measures."

“We are pleased with our results in Q3 that were supported by the encouraging adoption of our latest product innovations despite facing a challenging industrial environment,” said Shai Terem, President and CEO of Markforged. “We see positive momentum following the successful launch of metal printing capability for the FX10 in Q3, which is the world’s first industrial 3D printer for metals and composites. Furthermore, we remain excited about the pending acquisition by Nano Dimension and our ability to bring together our pioneering, complementary product portfolios that we expect will further enhance our ability to serve our customers on the manufacturing floor with a more complete offering of highly innovative solutions and a stronger balance sheet to weather this industrial slowdown cycle.”

Business Updates

- **Nano Dimension Ltd. (“Nano Dimension”) to Acquire Markforged:** On September 25, 2024, Markforged jointly announced with Nano Dimension that Markforged entered into a definitive agreement pursuant to which Nano Dimension will acquire all outstanding shares of Markforged in an all-cash transaction for \$5.00 per share, without interest and less any applicable tax withholdings. The transaction, which was unanimously approved by the Boards of Directors of both companies, is expected to close by the first quarter of 2025, subject to the satisfaction or waiver of certain closing conditions, including the approval of the transaction by Markforged’s stockholders, and required regulatory approvals.
- **Q3 Performance:** Markforged revenues increased by 2.0% year-over-year to \$20.5 million in Q3, despite persistently tough market conditions that continue to impact system sales. Consumable and services sales were healthy, up 11.8% and 13.2% year-over-year, respectively. Following the first shipment in Q2, Markforged saw continued traction for its PX100 metal binder jetting system by shipping a second system in Q3. Non-GAAP gross margin for the quarter was 50.9%, up 4.0% from the third quarter of 2023, which was driven by operational efficiencies and product mix.
- **Markforged Announces Settlement In IP Litigation:** On September 23, 2024, Markforged announced that it entered into a Settlement and Patent License Agreement (the “Settlement Agreement”) in connection with the patent infringement litigation brought by Continuous Composites Inc. (“Continuous Composites”). The Settlement Agreement resolved all claims and counterclaims in this litigation. Under the terms of the Settlement Agreement, Markforged made an up-front payment of \$18 million to Continuous Composites on October 10, 2024, and is required to make three additional installment payments thereafter of \$1 million, \$2 million and \$4 million in the fourth quarters of fiscal years 2025, 2026 and 2027, respectively.

No Earnings Call and Guidance

In light of the pending merger transaction with Nano Dimension announced on September 25, 2024, and as is customary during the pendency of such transactions, Markforged will not host an earnings conference call and is not providing forward-looking guidance.

Bentley Systems Announces Third Quarter 2024 Results

7 November 2024

Bentley Systems, Incorporated, the infrastructure engineering software company, announced results for the quarter ended September 30, 2024.

Third Quarter 2024 Results

- Total revenues were \$335.2 million, up 9.3% or 9.1% on a constant currency basis, year-over-year;
- Subscriptions revenues were \$303.2 million, up 12.0% or 11.8% on a constant currency basis, year-over-year;
- Annualized Recurring Revenues (“ARR”) was \$1,270.7 million as of September 30, 2024, compared to \$1,124.8 million as of September 30, 2023, representing a constant currency ARR growth rate of 12%;
- Last twelve-month recurring revenues dollar-based net retention rate was 109%, compared to 110% for the same period last year;
- Operating income margin was 20.5%, compared to 24.0% for the same period last year;
- Adjusted operating income inclusive of stock-based compensation expense (“Adjusted OI w/SBC”) margin was 26.7%, compared to 28.2% for the same period last year;
- Net income per diluted share was \$0.13, compared to \$0.16 for the same period last year;
- Adjusted net income per diluted share (“Adjusted EPS”) was \$0.24, compared to \$0.22 for the same period last year; and
- Cash flows from operations was \$86.1 million, compared to \$72.8 million for the same period last year.

Nine Months Ended September 30, 2024 Results

- Total revenues were \$1,003.3 million, up 9.3% or 9.3% on a constant currency basis, year-over-year;
- Subscriptions revenues were \$907.8 million, up 12.4% or 12.4% on a constant currency basis, year-over-year;
- Operating income margin was 24.0%, compared to 21.0% for the same period last year;
- Adjusted OI w/SBC margin was 29.6%, compared to 27.2% for the same period last year;
- Net income per diluted share was \$0.57, compared to \$0.46 for the same period last year;
- Adjusted EPS was \$0.86, compared to \$0.72 for the same period last year; and
- Cash flows from operations was \$353.7 million, compared to \$329.6 million for the same period last year.

Executive Chair Greg Bentley said, “The impressive inaugural quarter since completing our generational succession underscores my confidence in raising our sights broadly. The Company’s execution is sustaining progress towards our annual ramp in ARR growth. The *Year in Infrastructure 2024* Conference showcased advancements in going digital that are ever more effectively surmounting the infrastructure engineering resource capacity gap. And our strategically significant acquisition of Cesium, with the other strategic initiatives Nicholas and his team have unveiled, exemplifies our reinvigorated prioritization of compelling new growth ambitions.”

CEO Nicholas Cumins said, “During my first 100 days as CEO, we unveiled ambitious strategic moves that will help propel our future growth: the acquisition of 3D geospatial company Cesium; a strategic partnership with Google to integrate their geospatial content; a new product portfolio for asset analytics and a new generation of engineering applications, both leveraging AI and digital twin technologies to improve the way infrastructure is designed, built, and operated. At the same time, we delivered strong quarterly operating results. Our year-over-year ARR growth on a constant currency basis accelerated to 12% in 24Q3 (12.5% excluding China). Strength was broad based across geographies and sectors as we continued to operate at a high level of performance, with favorable end-market conditions for the foreseeable future.”

CFO Werner Andre said, “24Q3’s upward inflection in year-over-year ARR growth is directionally consistent with our expectations for this year’s second half, more than compensating for attrition prevailing stubbornly in China. Growth in subscriptions revenues (now 91% of total revenues) remains robust at 12.4% year-to-date in constant currency, although total revenue growth for 2024 is expected at the lower end of our annual outlook range due to continued declines in Cohesive professional services for Maximo. Profitability and cash flow in the quarter position us well in relation to our profitability outlook and an increased cash flow outlook for the year. In October we entered into a new five-year \$1.3 billion bank credit facility with a further \$500 million ‘accordion’ feature.”

Recent Developments

- On October 18, 2024, we entered into a new five-year senior secured credit agreement, which provides us with a \$1.3 billion revolving credit facility, as well as an incremental \$500 million “accordion” feature to increase the facility in the form of both revolving indebtedness and incremental term loans. We used borrowings under the revolving credit facility to repay all indebtedness outstanding under our previous credit facility, including our outstanding term loan;
- On October 9, 2024, we announced a strategic partnership with Google to integrate Google’s high-quality geospatial content with Bentley’s infrastructure engineering software and digital twin platform to improve the ways infrastructure is designed, built, and operated “in context”; and
- On September 6, 2024, we announced the acquisition of 3D geospatial company Cesium. Cesium is recognized as the foundational open platform for creating immersive 3D geospatial environments, and its 3D Tiles open standard has been widely adopted by

leading enterprises, governments, and tens of thousands of application developer teams globally

For full disclosure of the Second quarter 2024 results, [please click here.](#)

Call Details

Bentley Systems will host a live Zoom video webinar on November 7, 2024 at 8:15 a.m. EST to discuss results for third quarter ended September 30, 2024.

Those wishing to participate should access the live Zoom video webinar of the event through a direct registration link

at https://us06web.zoom.us/webinar/register/WN_ZITBingnQoKzZgcRVSRB8w#/registration.

Alternatively, the event can be accessed from the Events & Presentations page on Bentley Systems' Investor Relations website at <https://investors.bentley.com>. In addition, a replay and transcript will be available after the conclusion of the live event on Bentley Systems' Investor Relations website for one year.

FARO Announces Third Quarter Financial Results

6 November 2024

FARO® Technologies, Inc., a global leader in 4D digital reality solutions, announced its financial results for the third quarter ended September 30, 2024.

"I am proud of our ongoing progress in profitability, achieving 55.7% gross margins, GAAP net loss of \$0.3 million and \$8.9 million of adjusted EBITDA, or 10.7% of revenue, all exceeding our expectations for the third quarter. This marks a significant transformation in our operations over the past year, as its the first time that we have delivered back-to-back double-digit quarterly adjusted EBITDA margins in almost a decade," said Peter Lau, President & Chief Executive Officer. "Looking ahead, we are committed to executing on our growth initiatives, even in a difficult macroeconomic environment. With our recent product launches, including the Quantum X Arm and next generation Focus Premium Max Laser Scanner, we are excited about the actions we are taking to drive organic revenue growth over the longer term."

Third Quarter 2024 Financial Summary

- Total sales of \$82.6 million, down 5% year over year
- Gross margin of 55.7%, compared to 48.0% in the prior year period
- Non-GAAP gross margin of 56.1%, compared to 48.9% in the prior year period
- Operating expenses of \$43.8 million, compared to \$48.6 million in the prior year period
- Non-GAAP operating expenses of \$40.1 million, compared to \$41.5 million in the prior year period
- Net loss of \$0.3 million, or \$(0.02) per share compared to net loss of \$8.8 million, or \$(0.46) per share in the prior year period

- Non-GAAP net income of \$4.0 million, or \$0.21 per share compared to non-GAAP net income of \$0.5 million, or \$0.03 per share in the prior year period
- Adjusted EBITDA of \$8.9 million, or 10.7% of total sales compared to \$3.5 million, or 4.1% of total sales in the prior year period
- Cash, cash equivalents & short-term investments of \$88.9 million compared to \$96.3 million as of December 31, 2023

* A reconciliation of the non-GAAP financial measures to the most directly comparable GAAP financial measures is provided in the financial schedules portion at the end of this press release. An additional explanation of these measures is included below under the heading "Non-GAAP Financial Measures".

Outlook for the Fourth Quarter 2024

For the fourth quarter ending December 31, 2024, FARO currently expects:

- Revenue in the range of \$88 to \$96 million
- Gross margin in the range of 55.6% to 57.1%. Non-GAAP gross margin in the range of 56.0% to 57.5%
- Operating expenses in the range of \$47.4 to \$49.4 million. Non-GAAP operating expenses in the range of \$40.5 to \$42.5 million
- Net (loss) income per share in the range of (\$0.15) to \$0.05. Non-GAAP net income per share in the range of \$0.32 to \$0.52.

Conference Call

The Company will host a conference call to discuss these results on Wednesday, November 6, 2024, at 4:30 p.m. ET. Interested parties can access the conference call by dialing (800) 343-4849 (U.S.) or +1 (785) 424-1699 (International) and using the passcode FARO. A live webcast will be available in the Investor Relations section of FARO's website at: <https://www.faro.com/en/About-Us/Investor-Relations/Financial-Events-and-Presentations>

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

HOMAG- Business figures for the first nine months of 2024: Slight increase in order intake at low level

7 November 2024

Following the sharp decline in 2023, the HOMAG Group's order intake increased again slightly in the first nine months of 2024. Sales and earnings decreased as expected.

"Even though our order intake has increased again slightly from a low level, we do not yet see an end to the market weakness," explains CEO Dr. Daniel Schmitt. "This is particularly evident in the continued subdued demand for individual machines from the furniture industry, while the

situation for large-scale projects is somewhat better and the service business is growing slightly despite the difficult environment.”

The HOMAG Group’s order intake increased slightly by six percent to EUR 1,031 million (previous year: EUR 968 million) between January and September 2024. The orders on hand decreased to EUR 806 million as of September 30, 2024 (9/30/2023: EUR 832 million). In the first three quarters of 2024, sales dropped by 14 percent to EUR 1,055 million (previous year: EUR 1,222 million) and EBIT before extraordinary effects decreased to EUR 35.0 million (previous year: EUR 91.2 million) as a result of the low order intake in the previous year.

The HOMAG Group is countering the lower capacity utilization with flexibilization measures such as short-time work and a reduction in the number of external employees. The package of measures to adjust capacity and increase efficiency, which included the reduction of around 600 jobs, has also been completed. “We will thus ensure our competitiveness and we also want to increase our profitability again,” says Dr. Daniel Schmitt. Accordingly, the number of employees decreased to 6,875 as of September 30, 2024 (09/30/2023: 7,482 employees). In addition to the job cuts, a reclassification effect must also be taken into account, as around 120 employees of a Polish service company have no longer been allocated to the HOMAG Group but to the parent company Dürr since the beginning of 2024.

Nemetschek Group continues its strong and profitable growth course in Q3 2024 and confirms the outlook for full year 2024

7 November 2024

The Nemetschek Group, a global provider of software solutions for the construction and media industries, continued its profitable growth course in Q3 2024. Growth was once again driven by subscription and SaaS revenue, which increased to a new record level. Based on the successful development in the first nine months, the Executive Board reiterates both its previous outlook for the operating business (i.e. excluding GoCanvas acquisition effects) and the extended outlook following the acquisition of GoCanvas, which was consolidated for the first time in Q3 2024.

"Our third quarter clearly shows that the Nemetschek Group continues its profitable growth course - while transitioning to a subscription and SaaS-centric business model. Even though the general economic conditions remain challenging, especially in Europe, the strategic advantage of our globally operating brands is clearly evident," says Yves Padrines, CEO of the Nemetschek Group. "We continue to consistently implement our strategy of generating value-added growth and accelerating the digital transformation as well as the shift towards greater efficiency and sustainability for our customers in the construction industry. In addition to our continued internationalization and our focus on new technologies such as AI and cloud, the acquisition of GoCanvas will also contribute to future growth. With our performance in the first nine months of the year, we have created a strong basis to fully achieve our targets for 2024."

Key Group Performance Indicators in Q3 and 9M 2024

- The main driver in Q3 was once again revenues from subscription and SaaS offerings, which increased by 94.3% (currency-adjusted: 95.1%) compared to Q3 2023, significantly outpacing total revenue and reaching a new record high of EUR 150.3 million. Organic growth (excluding GoCanvas) amounted to 77.5% (currency-adjusted: 78.2%). In the first nine months, this revenue category increased significantly by 82.1% (currency-adjusted: 82.6%) to EUR 381.2 million, with organic growth amounting to 75.9% (currency-adjusted: 76.4%).
- Annual recurring revenue (ARR) increased by 33.0% (currency-adjusted: 33.7%) to EUR 883.3 million, with organic growth amounting to 25.2% (currency-adjusted: 25.8%). ARR growth was therefore significantly higher than revenue growth, which indicates significant growth potential in the next 12 months.
- In line with the Group strategy, the share of recurring revenues as a percentage of total revenues increased by more than 10 percentage points to 86.0% in the first nine months (prior-year period: 74.8%) and thus already reached the target for the full year 2024.
- Group revenue increased by 15.1% (currency-adjusted: 15.8%) to EUR 253.0 million in Q3 compared to the same quarter of the previous year. Organic growth amounted to 8.9% (currency-adjusted: 9.6%). In the first nine months, revenue grew to EUR 704.7 million, an increase of 11.5% (currency-adjusted: 12.0%). Purely organic growth amounted to 9.3% (currency-adjusted: 9.8%).
- The earnings before interest, taxes, depreciation and amortization (EBITDA) increased by 6.7% to EUR 76.2 million compared to the same quarter of the previous year. The EBITDA margin of 30.1% in Q3 was diluted by the currently still lower margin of GoCanvas, which was consolidated since the beginning of Q3. The organic EBITDA margin (excluding GoCanvas) amounted to 32.2% in Q3. In the first nine months of the year, EBITDA increased by 9.2% to EUR 205.9 million, which corresponds to a margin of 29.2% (prior-year period: 29.8%). The organic margin (excluding the dilutive effect of GoCanvas) was 29.9%. This includes one-off costs for M&A activities in the mid-single-digit million euro range from Q2. Excluding these acquisition-related effects, the adjusted organic EBITDA margin was 30.8%.
- Net income for the quarter was 12.8% below the previous year at EUR 39.3 million due to higher amortization charges from the purchase price allocation (PPA) and higher financing costs in connection with the GoCanvas acquisition. This corresponds to earnings per share (EPS) of EUR 0.34 (Q3 2023: EUR 0.39). EPS before PPA amortization was at the previous year level at EUR 0.44. In the first nine months, net income increased by 8.5% to EUR 123.8 million while the EPS amounted to EUR 1.07 (9M 2023: EUR 0.99). Adjusted for PPA amortization, EPS was at EUR 1.26, an increase of 10.1% versus EUR 1.14 after the first nine months of the previous year.

Strategic highlights in the first nine months of 2024

- The Group-wide transition of the business model to subscription and SaaS continues to progress successfully and according to plan, primarily driven by the Build segment with

the transition of the Bluebeam brand and the SaaS solutions of the newly acquired GoCanvas business (since Q3) as well as the Design segment.

- The continued internationalization and the intensified Group-wide go-to-market approach are progressing according to plan. At 18.7% in North America and 19.4% in Asia/Pacific, growth abroad in the first nine months was significantly higher than in the German domestic market (+2.6%), which continues to be affected by the weak construction industry.
- The Group's development activities continue to focus on new technologies such as artificial intelligence and cloud features. In order to increase the operational excellence and ensure future growth, Nemetschek continues to work on further enhancing its business structures and processes.
- GoCanvas Holdings, Inc., the largest acquisition in the company's history, was successfully completed by the Nemetschek Group on July 1. The US-based SaaS-company is a leading software provider for construction site collaboration. The complementary technologies, customer bases and regional sales structures of GoCanvas and the Nemetschek Group open up considerable synergy potential and growth opportunities. The acquisition also strengthens the Nemetschek Group's market position in North America, while providing GoCanvas with an attractive base for expansion in Europe and in the Asia-Pacific region.

Segment Developments in Q3 and 9M 2024 (see table)

- The Design segment recorded a growth rate of 5.4% (currency-adjusted: 6.3%) to EUR 115.7 million in Q3. As expected, growth in Q3 was slightly below the previous quarters due to the high prior-year figures, which were attributable to a strong license business in the light of the last time buy of perpetual licenses without a software service contract. In the first nine months, revenues grew to EUR 343.7 million (8.1%, currency-adjusted: 8.8%). Growth was again driven by the revenue from subscription/SaaS models, which increased by 75.0%. EBITDA in Q3 decreased slightly by 2.1% to EUR 33.8 million, which corresponds to an EBITDA margin of 29.2%. In 9M 2024, the EBITDA margin improved to 27.9% (prior-year period: 26.8%).
- The acquired GoCanvas business was consolidated in the Build segment for the first time at the beginning of Q3. Segment revenues in Q3 therefore increased significantly by 33.5% (currency-adjusted: 34.0%) to EUR 96.2 million. However, the segment also recorded strong organic growth of 14.6% (currency-adjusted: 15.0%). In the first nine months, revenues grew to EUR 238.4 million, an increase of 18.3% (currency-adjusted: 18.6%). Organic growth amounted to 11.6% (currency-adjusted: 11.8%). The EBITDA margins of 31.5% in Q3 (Q3 2023: 35.0%) and 32.2% in the first nine months (9M 2023: 35.9%) were below the previous year's figures due to the still dilutive effect of the GoCanvas acquisition. Organic margins (excluding GoCanvas) were up on the previous year at 37.7% in Q3 and 34.5% in the first nine months. The transition of the business model to subscription and SaaS will lead to a significant acceleration in growth in Q4, as

the comparative basis of the previous year contains almost no license revenues for the first time since the transition started.

- In the Manage segment, revenues in Q3 amounted to EUR 11.7 million and were therefore almost in line with the previous year (EUR 11.8 million). The discontinuation of a unit for consulting services with low profitability had a negative impact on revenues. In the first nine months, revenues increased slightly by 1.9% to EUR 36.7 million. The EBITDA margin expanded to 7.2% in Q3 (previous year: 3.4%) and to 7.3% in the first nine months (previous year: 1.2%).
- The Media segment showed an acceleration in growth in Q3. With an increase of 8.2% (currency-adjusted: 8.8%), revenues reached EUR 30.4 million. This growth was above the underlying market growth, which is still feeling the effects of ongoing customer restraint in the US market. In the first nine months, revenues amounted to EUR 88.6 million, representing a growth of 7.9% (currency-adjusted: 8.6%). The EBITDA margin amounted to 37.0% in Q3 2024 and 34.3% in the first nine months.

Outlook for Financial Year 2024 confirmed

Following the successful development in the first nine months of 2024, the Executive Board fully confirms its previous guidance for 2024. In organic terms, i.e. excluding the effects of the GoCanvas acquisition, the Executive Board expects a currency-adjusted revenue growth between 10% and 11% compared to the previous year, a growth in annual recurring revenue (ARR) of around 25%, a share of recurring revenue as a percentage of total revenue of around 85% and an EBITDA margin of between 30% and 31%.

At the same time, the Executive Board reiterates the extended outlook for 2024, according to which the consolidation of GoCanvas (consolidated from July 1) will continue to have an additional positive impact of around 3 percentage points on the targeted revenue growth for the full year. The Group EBITDA margin is expected to be diluted by around 100 basis points for the full year, as GoCanvas' profitability is still below the Group average. These figures do not yet reflect the full potential of the acquisition, as both the revenue and EBITDA contribution of GoCanvas is reduced by a high single-digit million euro amount in the second half of the year due to the IFRS-related purchase price allocation. The ARR growth is expected to increase from around 25% to more than 30% in 2024. The share of recurring revenue increases to around 85%.

The statements on the effects of the acquisition of GoCanvas are subject to the proviso that important key figures, including the calculation of the purchase price allocation (PPA), have not yet been finalized. In addition, the guidance is based on the assumption that the global economic and industry-specific conditions do not deteriorate significantly in 2024.

Overview of quarterly key figures (Q3-24)

In EUR million	Q3 2024	Q3 2023	Δ in % (FX-adj.)	Δ in % organic (FX-adj.)
ARR	883.3	664.0	+33.0% (+33.7%)	+25.2% (+25.8%)
Revenues	253.0	219.8	+15.1% (+15.8%)	+8.9% (+9.6%)
- thereof software licenses	24.7	44.0	-43.8% (-42.8%)	-43.8% (-42.8%)
- thereof recurring revenues	220.8	166.0	+33.0% (+33.7%)	+25.2% (+25.8%)
- Subscription + SaaS (part of recurring revenue)	150.3	77.4	+94.3% (+95.1%)	+77.5% (+78.2%)
EBITDA	76.2	71.4	+6.7% (+7.5%)	+7.8% (+8.1%)
EBITDA margin	30.1%	32.5%		
Organic EBITDA margin (w/o GoCanvas dilution effect)	32.2%	32.5%		
Adjusted organic EBITDA margin (w/o GoCanvas dilution effect & one-off M&A related costs)	32.4%	32.5%		
EBIT	57.9	56.6	+2.4%	
EBIT margin	22.9%	25.7%		
Net income (Group shares)	39.3	45.0	-12.8%	

Earnings per share in EUR	0.34	0.39	-12.8%
Net income (Group shares) before amortization of purchase price allocation (PPA)	50.8	50.9	-0.2%
Earnings per share in EUR before amortization of PPA	0.44	0.44	-0.2%

Overview of quarterly key figures per segment* (Q3-24)

In EUR million	Q3 2024	Q3 2023	Δ in % (FX-adj.)	Δ in % organic (FX-adj.)
Design				
Revenues	115.7	109.8	+5.4% (+6.3%)	
EBITDA	33.8	34.5	-2.1% (-1.4%)	
EBITDA margin	29.2%	31.4%		
Build				
Revenues	96.2	72.1	+33.5% (+34.0%)	+14.6% (+15.0%)
EBITDA	30.3	25.2	+20.2% (+22.2%)	+23.5% (+23.8%)
EBITDA margin	31.5%	35.0%		
Organic EBITDA margin (w/o GoCanvas dilution effect)	37.7%	35.0%		

Manage

Revenues	11.7	11.8	-1.0% (-1.1%)
EBITDA	0.8	0.4	
EBITDA margin	7.2%	3.4%	

Media

Revenues	30.4	28.1	+8.2% (+8.8%)
EBITDA	11.3	11.3	-0.4% (-3.6%)
EBITDA margin	37.0%	40.2%	

* As at January 1, 2024, the Digital Twin business unit, including the dRofus brand, was reclassified from the Manage segment to the Design segment and subsequently consolidated here. The previous year's figures have been adjusted accordingly.

PTC Announces Fourth Fiscal Quarter and Full Fiscal Year 2024 Results

6 November

PTC reported financial results for its fourth fiscal quarter and full fiscal year ended September 30, 2024.

“In fiscal year 2024, we again delivered solid ARR and cash flow, with year-over-year ARR growth in the low double-digits and cash flow growth above 20%. We have a differentiated strategy that leverages our unique portfolio to help product companies accelerate their time to market and manage increasing complexity. It’s an exciting time because our products are at the epicenter of driving business transformation at our customers,” said Neil Barua, President and CEO, PTC.

“We continue to focus on increasing customer value while enhancing shareholder returns,” Barua continued. “Today we announced a new \$2 billion share repurchase authorization through the end of fiscal 2027. We are also strengthening our ability to scale our business by realigning our go-to-market organization to better serve our customers,” concluded Barua.

PTC's Fiscal Fourth Quarter and Full Year Results Conference Call

The Company will host a conference call to discuss results at 5:00 pm ET on Wednesday, November 6, 2024. To participate in the live conference call, dial (888) 330-2508 or (240) 789-2735, provide the passcode 7328695, and press # or log in to the webcast, available on [PTC's Investor Relations website](#). A replay will also be available.

Read the full press release here: <https://www.ptc.com/en/news/2024/earnings-results-q4-fy24>

Rockwell Automation Reports Fourth Quarter and Full Year 2024 Results; Introduces Fiscal 2025 Guidance

7 November 2024

Rockwell Automation, Inc. reported fiscal 2024 fourth quarter and full year results and introduced fiscal 2025 guidance.

"Orders for the quarter came in lower than expected, reflecting continued softness in many of our end markets. Operating performance was solid, with good sales conversion, margin, and EPS. The performance of our Lifecycle Services segment stands out, with its higher exposure to process end markets, growth in digital services, and continued margin expansion. Reflecting on the full year, our people around the world have demonstrated remarkable dedication to serve our customers and bring new innovation to market, and to make the changes necessary to position us for market-beating growth and profit," said Blake Moret, Chairman and CEO.

Fiscal Q4 2024 Financial Results

Fiscal 2024 fourth quarter sales were \$2,036 million, down (21)% compared to \$2,563 million in the fourth quarter of fiscal 2023. Organic sales decreased (21)% and acquisitions increased sales by 1%, which was mostly offset by currency translation.

Fiscal 2024 fourth quarter net income attributable to Rockwell Automation was \$239 million or \$2.09 per share, compared to \$303 million or \$2.61 per share in the fourth quarter of fiscal 2023. The decreases in net income attributable to Rockwell Automation and EPS were primarily due to lower sales volume. Fiscal 2024 fourth quarter adjusted EPS was \$2.47, down (32)% compared to \$3.64 in the fourth quarter of fiscal 2023, primarily due to lower sales volume and lower segment operating margin.

Pre-tax margin was 13.5% in the fourth quarter of fiscal 2024 compared to 12.4% in the same period last year. The increase was primarily driven by the prior year Sensia goodwill impairment, partially offset by lower sales volume and current year restructuring charges.

Total segment operating earnings were \$409 million in the fourth quarter of fiscal 2024, down (28)% compared to \$572 million in the same period of fiscal 2023. Total segment operating margin was 20.1% in the fourth quarter compared to 22.3% a year ago. The decrease in segment operating margin was driven by lower sales volume and unfavorable mix, partially offset by the benefits from cost reduction actions and lower incentive compensation.

Cash flow generated by operating activities in the fourth quarter of fiscal 2024 was \$432 million, compared to \$840 million in the fourth quarter of fiscal 2023. Free cash flow was \$367

million compared to \$776 million in the fourth quarter of fiscal 2023. Decreases in cash flow provided by operating activities and free cash flow were primarily due to lower pre-tax income.

Fiscal 2024 Full Year Financial Results

Sales were \$8,264 million in fiscal 2024, down (9)% from \$9,058 million in fiscal 2023. Organic sales decreased (10)% and acquisitions increased sales by 1%.

Fiscal 2024 net income attributable to Rockwell Automation was \$953 million or \$8.28 per share, compared to \$1,387 million or \$11.95 per share in fiscal 2023. The decreases in net income and EPS attributable to Rockwell Automation were primarily due to lower sales volume and lower pre-tax margin. Fiscal 2024 Adjusted EPS was \$9.71, down (20)% compared to \$12.12 in fiscal 2023. The decrease in adjusted EPS was primarily due to lower sales volume and lower segment operating margin.

Pre-tax margin was 13.3% in fiscal 2024, compared to 17.8% last year. The decrease was primarily due to lower sales volume, the prior year PTC investment gain, and restructuring charges, partially offset by lower incentive compensation, the prior year Sensia goodwill impairment, and the benefits from cost reduction actions.

Total segment operating earnings were \$1,595 million in fiscal 2024, down (17)% from \$1,930 million in fiscal 2023. Total segment operating margin was 19.3% compared to 21.3% a year ago. The decrease was due to lower sales volume and unfavorable mix, partially offset by lower incentive compensation and the benefits from cost reduction actions.

Cash flow generated by operating activities in fiscal year 2024 was \$864 million, compared to \$1,375 million in fiscal 2023. Free cash flow was \$639 million compared to \$1,214 million last year. Decreases in cash flow provided by operating activities and free cash flow were driven by lower pre-tax income, higher compensation and benefits payments based on the prior year performance, and higher tax payments, partially offset by decreases in working capital.

Fiscal Year 2025 Outlook

The table below provides guidance for sales growth and earnings per share for fiscal 2025.

Sales Growth Guidance		EPS Guidance	
Reported sales growth	(4)% to 2%	Diluted EPS	\$7.65 - \$8.85
Organic sales growth ⁽¹⁾	(4)% to 2%	Adjusted EPS ⁽¹⁾	\$8.60 - \$9.80
Inorganic sales growth	~ 0%		
Currency translation	~ 0%		

⁽¹⁾ Organic sales growth and Adjusted EPS are non-GAAP measures. See **Adjusted Income, Adjusted EPS, and Adjusted Effective Tax Rate Reconciliation** for more information on these non-GAAP measures.

“Given the uncertainty in the current macroeconomic environment and the typical seasonality in our longer cycle business, we are expecting our fiscal Q1 sales to be down from Q4 levels, followed by a gradual sequential improvement through the year. We will continue to fuel high-growth areas and drive margin expansion projects that increase our business resilience. Our market position remains strong given our portfolio and our leadership in North America, which continues to be the best-performing market,” Moret continued.

Following is a discussion of quarter and full year results for our business segments.

Intelligent Devices

Intelligent Devices fiscal 2024 fourth quarter sales were \$946 million, a decrease of (19)% compared to \$1,171 million in the same period last year. Organic sales decreased (20)% and acquisitions increased sales by 1%. Segment operating earnings were \$195 million in the fourth quarter of fiscal 2024 compared to \$249 million in the same period last year. Segment operating margin decreased to 20.6% in the fourth quarter of fiscal 2024 from 21.3% a year ago driven by lower sales volume and unfavorable mix, partially offset by the benefits from cost reduction actions, lower incentive compensation, and an adjustment to an earnout accrual tied to achievement of the seller’s revenue target on our Clearpath Robotics acquisition.

Intelligent Devices fiscal 2024 sales were \$3,804 million, a decrease of (7)% from \$4,098 million last year. Organic sales decreased (9)% and acquisitions increased sales by 2%. Segment operating earnings were \$700 million in fiscal 2024 compared to \$828 million in fiscal 2023. Segment operating margin decreased to 18.4% in fiscal 2024, from 20.2% a year ago driven by lower sales volume, partially offset by lower incentive compensation, positive price/cost, and an adjustment to an earnout accrual tied to achievement of the seller’s revenue target on our Clearpath Robotics acquisition.

Software & Control

Software & Control fiscal 2024 fourth quarter total and organic sales were \$502 million, a decrease of (39)% compared to \$821 million in the same period last year. Segment operating earnings were \$112 million in the fourth quarter of fiscal 2024 compared to \$275 million in the same period last year. Segment operating margin decreased to 22.3% in the fourth quarter of fiscal 2024 from 33.5% a year ago driven by lower sales volume, partially offset by the benefits from cost reduction actions and lower incentive compensation.

Software & Control fiscal 2024 total and organic sales were \$2,187 million, a decrease of (24)% from \$2,886 million last year. Segment operating earnings were \$530 million in fiscal 2024 compared to \$953 million in fiscal 2023. Segment operating margin decreased to 24.2% in fiscal 2024 from 33.0% a year ago driven by lower sales volume, partially offset by lower incentive compensation and positive price/cost.

Lifecycle Services

Lifecycle Services fiscal 2024 fourth quarter sales were \$588 million, an increase of 3% compared to \$571 million in the same period last year. Organic sales increased 2% and acquisitions increased sales by 1%. Segment operating earnings were \$102 million in the fourth quarter of fiscal 2024 compared to \$47.8 million in the same period last year. Segment operating margin increased to 17.4% in the fourth quarter of fiscal 2024 from 8.4% a year ago driven by lower incentive compensation, strong project execution, and Sensia margin improvement.

Lifecycle Services fiscal 2024 sales were \$2,273 million, an increase of 10% from \$2,074 million last year. Organic sales increased 8% and acquisitions increased sales by 2%. Segment operating earnings were \$366 million in fiscal 2024 compared to \$148 million in fiscal 2023. Segment operating margin increased to 16.1% in fiscal 2024 from 7.2% a year ago driven by higher sales volume, lower incentive compensation, strong project execution, Sensia margin improvement, and ongoing savings from prior year structural actions.

Supplemental Information

ARR - Total ARR grew 16% and Organic ARR grew 14% compared to the end of the fourth quarter of fiscal 2023.

Corporate and Other - Fiscal 2024 fourth quarter corporate and other expense of \$39 million was flat compared to the fourth quarter of 2023. Corporate and other expense was \$136 million for the full fiscal year 2024 compared to \$128 million in fiscal 2023.

Purchase accounting depreciation and amortization, and impairment - Fiscal 2024 fourth quarter purchase accounting depreciation and amortization, and impairment expense was \$36 million, down \$149 million from the fourth quarter of fiscal 2023. Full year fiscal 2024 purchase accounting depreciation and amortization, and impairment expense was \$144 million, down \$121 million from fiscal 2023. The decreases were primarily due to the prior year Sensia goodwill impairment, partially offset by amortization related to the acquisitions of Clearpath Robotics and Verve Industrial Production.

Restructuring charges - Fiscal 2024 fourth quarter and full year restructuring charges were \$28 million and \$97 million, respectively, which primarily relate to severance benefits in conjunction with the continuation of an enterprise-wide comprehensive program to optimize cost structure and expand margins.

Tax - On a GAAP basis, the effective tax rate in the fourth quarter of fiscal 2024 was 13.1% compared to 35.2% in the fourth quarter of 2023. The adjusted effective tax rate for the fourth quarter of fiscal 2024 was 14.9% compared to 17.0% in the fourth quarter of 2023. The effective tax rate for the full fiscal year 2024 was 13.8% compared to 20.5% in fiscal 2023. The adjusted effective tax rate for the full fiscal year 2024 was 15.1% compared to 16.4% in fiscal 2023. The decreases in the effective tax rate in the fourth quarter and full year were primarily due to a valuation allowance established in the prior year on certain deferred tax assets of our Sensia joint venture and tax effects of the related goodwill impairment, and higher discrete tax

benefits in 2024 compared to 2023. The decrease in the adjusted effective tax rate was primarily due to higher discrete tax benefits in fiscal 2024 than in fiscal 2023.

Share Repurchases - The Company repurchased approximately 450 thousand shares of its common stock at a cost of \$118.0 million during the fourth quarter of fiscal 2024. For the full fiscal year 2024, the Company repurchased 2.2 million shares of its common stock at a cost of \$594 million. At September 30, 2024, \$1.3 billion remained available under existing share repurchase authorizations.

Return on Invested Capital (ROIC) - ROIC was 15.2% for fiscal year 2024 compared to 20.9% for fiscal year 2023. The decrease was primarily driven by lower pre-tax income, partially offset by a lower effective tax rate.

Conference Call

A conference call to discuss our financial results will take place at 8:30 a.m. Eastern Time on Thursday, November 7, 2024. The call will be an audio webcast and accessible on the Rockwell Automation website (<https://ir.rockwellautomation.com/investors/>). Presentation materials will also be available on the website prior to the call.

Interested parties can access the conference by using the following numbers: (888) 330-2022 in the U.S. and Canada; (646) 960-0690 for other countries. Use the following passcode: 5499533. Please join 10 minutes prior to the start of the call.

Both the presentation materials and a replay of the call will be available on the Investor Relations section of the Rockwell Automation website through December 7, 2024.

Modelon AB Interim report Q3 2024

7 November 2024

Increased software revenue with new customers in Q3

Q3 Highlights

- **ARR increased to MSEK 56.4 (47.1), an annual growth of 20%.**
- **Net revenue amounted to MSEK 20.5 (19.1), of which software revenue was MSEK 14.4 (12.4).**
- **Cash flow from operations amounted to MSEK -17.6 (-11.9).**
- **Adjusted EBIT amounted to MSEK -12.0 (-11.5).**
- **Operating expenses were MSEK 39.8 (30.7), including non-recurring items of MSEK 7.1 (0.0) and development costs of MSEK 13.8 (11.4).**
- **Net income amounted to MSEK -18.8 (-11.6).**
- **Earnings per share amounted to SEK -1.11 (-1.05) before dilution.**

Comments from the CEO

Commercial update

Revenues in the third quarter were SEK 20.5 million, an increase of 7 percent compared with the same period last year. Growth was driven by software license sales, and total annual recurring revenues were up by 20 percent. Our flagship product Modelon Impact showed an ARR increase of 53 percent, thanks to new customer wins and increased license sales to existing customers. A new contract with a North American supplier of sustainable energy storage was among the new deals in the quarter. Operating profit was SEK -12.0 million, adjusted for non-recurring items. Operating cash flow was SEK -17.6 million.

During the third quarter, we launched an efficiency program to accelerate the path to profit and positive cash flow. This program will take full effect from 2025 and is expected to yield annual savings of SEK 25 million. We achieve this by reducing external costs, and by removing sites and overhead functions. I am convinced that these changes will make us leaner and increase focus on software growth. Our service expertise enables an increased adoption of our platform and supports development of high quality content for software customers. All restructuring costs associated with the efficiency program, SEK 7.1 million, are booked in the third quarter.

Customer feedback

During my first months, I had meetings with more than 15 customers and prospects in North America and Europe. I received a lot of positive feedback on our company, especially on the responsiveness and expertise of our employees, as well as on the usability of Modelon Impact. The combination of a user-friendly interface, a cloud-native software architecture, and a rich library of simulation components gives us a position to challenge all existing players on the system simulation market. In addition, we provide flexibility for customers to add their own knowledge, thanks to development and simulation environments that are based on open standards and interfaces.

My discussions with customers showed that we have expansion opportunities by deploying Modelon Impact to a wider group of users in each company. These users are often domain experts without experience of simulations, which puts additional demands on us to have simple workflows, interfaces, and tool configurations. I also see future growth coming from customers that create virtual sensors and digital twins of their physical systems, to improve system performance and reduce maintenance costs.

Strategic review findings

One of my first actions as CEO was to initiate a strategic business review, covering the market potential, competitive landscape, product offering, and internal efficiency. A key finding is that the market for system simulation has a higher potential than we had previously considered. A growing number of companies have decided that the traditional way of developing new products, through prototyping of innovative technology, takes a long time and is too costly. Instead, they are moving their engineering activities into a virtual environment with our system simulation platform as the main tool. This means faster revenue generation for our customers, thanks to shorter design cycles and products that are better optimized for market requirements.

As a result of the strategic review, I decided to adjust and simplify Modelon's organization from

October 1. All customer interfaces for sales and delivery are consolidated under a Chief Revenue Officer, with a mission to acquire new contracts and generate success for existing customers. A Chief Product Officer and Chief Technology Officer will together ensure that we invest in growing markets, prioritize customer requirements, and execute effectively. A new Chief Strategy Officer role increases our focus on innovation, both internally and through contacts with partners and academia. The Chief Finance and Human Resources Officers drive external reporting, process development, recruitment, and competence development to continuously improve operational efficiency.

Market references

A few weeks ago, we hosted the conference *Modelon Innovate* in Copenhagen on the theme of “sustainability meets simulations.” The list of speakers included representatives from Meta, Volvo, Siemens, MAN, and EPRI, sharing experiences from their respective application domains. It was fantastic to hear how companies address some of the most important questions of our time, like carbon-free fuels, carbon capture, environmentally friendly datacenters, digital health care, and autonomous vehicles. The conference was a success, and I feel encouraged by the optimism among all conference participants that system simulation is the way to accelerate progress towards a more sustainable future.

We are always grateful when customers publicly share their experience of our products. A recent case study with MAN Energy Systems is a fitting example of how a market leader in energy systems is shifting focus to decarbonization. MAN ES develop large industrial heat pumps that use carbon dioxide as an environment friendly refrigerant. This has many advantages but requires precise engineering to be effective. MAN ES selected Modelon Impact for virtual prototyping and testing, both for steady-state and for dynamic behavior during start, stop, and varying operating conditions. The next step is to compare simulation results with real-world operations in the Danish city of Esbjerg, where MAN heat pumps are deployed at large scale. More details about the MAN case can be found on our home page, www.modelon.com.

Summary and outlook

I am inspired by many customer meetings during my first quarter as CEO and I am optimistic about the business prospects. Our customers work on important projects that increase efficiency and sustainability for people, industries, and society, and I am convinced that system simulations will help companies develop better solutions, faster and at lower cost. Based on customers’ feedback, I am confident that we have a product that can win against any alternative on the market. However, competition is fierce, and we need to continue investments in usability and scalability to address new requirements of demanding customers. We have unique knowledge in physics-based system simulation and are well-positioned to win market share and grow revenues. Our business model is based on cloud Software-as-a-Service, which scales in capacity as well as across industries and geographies. We are in an investment phase where product development and customer acquisition costs, in the short term, are higher than revenues, but we see opportunities in the mid- to long term to generate significant operating profit and cash flows.

Jan Häglund, CEO Modelon

NTT DATA: Financial Results for the Six Months Ended September 30, 2024

6 November 2024

NTT DATA Group Corporation announced its consolidated financial results for the six months ended September 30, 2024.

[Financial Results \(PDF : 501KB\)](#)

Implementation Investments

AtkinsRéalis and Revizto Sign Strategic Partnership to Advance Digital Collaboration and Deliver Sustainable Solutions

30 October 2024

AtkinsRéalis, a global leader in engineering, design, and project management, has entered into a strategic four-year partnership with Revizto, the industry-leading Integrated Collaboration Platform. This collaboration will enhance AtkinsRéalis' digital capabilities, enabling its teams to deliver more efficient, innovative, and sustainable solutions across both built and natural environments.

As part of this partnership, Revizto's cutting-edge technology will be fully integrated into AtkinsRéalis' operations, ensuring seamless alignment of people, data, and technology. This integration supports AtkinsRéalis' ongoing commitment to "engineering a better future for our planet and its people."

"At AtkinsRéalis, our vision of 'shaping the future of our industry and our world' is rooted in partnerships that deliver tangible, transformative value. This collaboration with Revizto elevates every facet of our operations, ensuring that we continue to deliver exceptional outcomes for our clients. By leveraging Revizto, we empower our teams to collaborate with precision, optimise project efficiency, and engineer consistently better outcomes. Together, we are driving forward high-value, innovative solutions that will shape the future for both our clients and the communities we serve."

Nuzrul Haque

Vice President of IT Business Partners and Design Engineering Solutions
AtkinsRéalis

The partnership will also strengthen AtkinsRéalis' ability to meet the growing demand for sustainable and Net Zero solutions through digitally driven processes.

"As an organisation committed to engineering a better future for our planet and its people, this partnership with Revizto is a critical step toward realising that vision. By integrating Revizto's digitally enabled platform into our operational processes, we are enhancing our ability to deliver ambitious projects. This technology enables us to network people, data, and technology across our global organisation and our partnerships, creating the transformational change needed to radically improve how we house, connect, power, and protect our communities."

Graham Candy

Strategic Operations Director
AtkinsRéalis

“At Revizto, we’re committed to driving positive change in the built environment, and we’re delighted to partner with AtkinsRéalis who share this vision. Our platform is designed to enhance collaboration and streamline workflows, enabling AtkinsRéalis to deliver exceptional projects with positive impacts for clients and communities.”

Arman Gukasyan
CEO and Founder
Revizto

For too long the AEC industry has come under criticism for under-investing, and seldom have the markets recognised or rewarded us for our efforts, but when considering the last 30 years of Digital Development in AEC, arguably we have made a paradigm shift. The individuals involved are ‘brilliant’ talent. In the right quarters, the progress is remarkable and this is now the ‘normal’, not the ‘exception’. We have seen the industry go from connecting basic and transformational technologies (2000), to pursuit of ‘all in’ Platforms (2015), to today where the most successful teams have become ‘System Integrators’ of Best in Class Technologies focused on their client’s needs. The need for agnostic collaboration across solutions has never been greater. This strategy is not only providing a cost effective alternative, but is enabling a much greater focus on their client’s needs. The investors have woken up to the shift and starting to reward those that can deliver; viewed not only as a business part of ‘Construction’, rather a business part of the ‘tech’ industry.

“I have had the privilege to work with the very best in the business and people at all levels across the globe. AtkinsRéalis is at the very forefront of this statement and their professional pursuit of genuine partnerships to achieve their strategies, is second to none. This agreement will enable both sides to bring even more like-minded individuals together to achieve our common goals for all Stakeholders.”

Mark Thompson
CEng MICE, Regional Director Northern Europe
Revizto

Incorporating Revizto helps streamline workflows, ensuring that teams can execute with precision and agility. This allows AtkinsRéalis to meet the growing demand for Net Zero solutions powered by digitally driven processes, while maintaining its focus on quality and delivery. By fostering seamless collaboration across all project stakeholders, the partnership ensures meaningful impacts, delivering ambitious solutions underpinned by excellence in execution. Together, AtkinsRéalis and Revizto are working toward a future where innovation and sustainability go hand-in-hand.

Simulations Plus and Partners Awarded New FDA Grant to Validate In Vitro-In Vivo Extrapolation Methods for Complex Formulations

30 October 2024

Simulations Plus, Inc. (“Simulations Plus”), a leading provider of biosimulation, simulation-enabled performance and intelligence solutions, and medical communications to the biopharma industry, announced a newly funded grant from the U.S. Food and Drug Administration (FDA), secured in partnership with the University of Strathclyde and InnoGI Technologies. The project is expected to improve the understanding of amorphous solid dispersion (ASD) formulations in different conditions and predict the impact of food and pH-dependent drug-drug interactions (DDIs) through the combination of novel *in vitro* testing and mechanistic modeling and simulation.

For this award, Professor Hannah Batchelor, through her lab at the University of Strathclyde, will analyze ASD drug products and their respective formulation variants. InnoGI Technologies will then test the different ASD formulations under fasted, fed, and higher gastric pH conditions utilizing the tiny-TIM *sg*, part of the SurroGUT™ Platform, *in vitro* system. Next, physiologically based pharmacokinetic (PBPK) models will be developed in the GastroPlus® platform to link *in vitro* dissolution with *in vivo* pharmacokinetic data and develop *in vitro-in vivo* extrapolations (IVIVEs). Finally, virtual bioequivalence (VBE) trial simulations will be conducted in GastroPlus to assess the clinical performance of ASD formulation variants to validate the approaches. The resulting outcomes are anticipated to help speed up formulation adjustments, reduce costs, and accelerate time-to-market for both innovator and generic ASD products.

“We are delighted to be at the forefront of this important research, which has the potential to significantly advance PBPK science and revolutionize how we predict drug product performance,” said Dr. Maxime Le Merdy, Director of PBPK Collaborations at Simulations Plus and principal investigator for this grant. “Developing a novel IVIVE methodology for ASD drug products will play a crucial role in optimizing formulation development, fine-tuning process parameters, and supporting bioequivalence assessments by offering key insights into the factors that impact *in vivo* performance.”

FDA scientific and program staff will actively collaborate with the University of Strathclyde, InnoGI Technologies, and Simulations Plus. Dr. Le Merdy, with assistance from scientists at Simulations Plus, will coordinate the modeling and simulation activities of the contract.

“By leveraging the power of this industry-academia-regulatory collaboration, we will push the boundaries of innovation and accelerate the development of safer, more effective therapies,” said Prof. Batchelor. “This unique partnership allows us to combine InnoGI’s cutting-edge *in vitro* technologies, GastroPlus’s mechanistic modeling, and real-world clinical insights, driving greater efficiency and confidence in drug development decisions.”

“As oral formulation development grows increasingly complex, evaluating drug product performance while studying luminal events in real time demands the integration of advanced technologies to bridge *in vitro* and *in vivo* testing gaps, thus reducing development risks for more efficient drug development,” said Susann Bellmann, CTO of InnoGI Technologies.

Funding for this collaboration is made possible by the Food and Drug Administration through grant award 1U01FD008388-01. Views expressed in this press release do not necessarily reflect the official policies of the Department of Health and Human Services; nor does any mention of

trade names, commercial practices, or organization imply endorsement by the United States Government.

TPV Technology Selects Centric PLM to Power Product Management Efficiency

31 October 2024

Centric Software® is pleased to announce that TPV Technology Limited, a leading global electronics manufacturer has selected Centric PLM™ to centralize product information and streamline workflows. Centric Software provides the most innovative enterprise solutions to plan, design, develop, source, buy, make, price, allocate, sell and replenish products such as consumer electronics, fashion, outdoor, luxury, multi-category retail, grocery, food & beverage and cosmetics & personal care to achieve strategic and operational digital transformation goals.

TPV Technology, established in Taiwan in 1967, is a leading global manufacturer of monitors and TVs, listed on the Shenzhen Stock Exchange. For 20 consecutive years, TPV has held the top position in the monitor market, commanding a steady 30% market share. Operating under a dual Original Brand Manufacturer (OBM) and Original Design Manufacturer (ODM) business model, TPV designs and manufactures products for major TV and PC brands, while also producing its own brands such as AOC, AGON and Envision. Since 2014, TPV has held exclusive, long-term licenses to manufacture and market Philips monitors, TVs and audio products. Philips, being its flagship brand, is TPV's primary focus for developing, manufacturing and marketing TVs and audio products.

With a strong commitment to delivering top-tier products, TPV identified the need for a centralized platform to improve product data management and drive efficiency across all business units. Through this partnership with Centric Software, TPV will utilize Centric PLM as the single source of truth for product data, facilitating real-time information flow and systematic product performance tracking.

"TPV has complex product portfolios, producing for leading brands while developing our own brands. We recognize the importance of efficiency in maintaining our high standards across every aspect of our business," says a TPV representative. "Centric PLM stood out as the best solution to enable a transparent, data-driven approach to product management."

TPV selected Centric PLM for its comprehensive features, reliable platform and seamless integration with its existing systems.

Implementing Centric PLM is expected to enhance global decision-making for teams, improve product data accuracy and reduce errors, enabling the company to manage its extensive product portfolio with greater precision.

"Centric PLM will allow us to manage the entire product lifecycle, from inception to end-of-life. Having this digital foundation and visibility into our product data will accelerate our digital transformation journey to drive long term growth," adds a TPV representative.

“Partnering with a company like TPV, known for its innovation and commitment to excellence, is an exciting opportunity for us,” says Fabrice Canonge, President of Centric Software. “We are thrilled to support their journey towards even greater operational efficiency and innovation through the adoption of Centric PLM.”

Product News

3drepo.io V5.12 – This time it isn't just about being fast

5 November 2024

We are excited to present the latest release of 3drepo.io!

In addition to all our enhancements we have also released 2D plans support, multiple image property in custom tickets, and much more.

2D plans support

In 3D Repo version 5.12, **2D Plans Support** has been introduced to enhance users' ability to manage both 2D and 3D information within the platform. This support allows users to view, and interact with 2D plans alongside 3D models, providing a clearer visual context for project layouts and spatial planning. The feature enables seamless integration between 2D drawings and 3D environments, which can improve accuracy in design review and streamline collaboration by offering more comprehensive project views.

2D plans uploaded to a project are listed on the “Drawings” page where they can be managed and calibrated against federations and model containers.

New “Multiple Image” Property in custom tickets

This feature introduces the ability to upload multiple images as a property in custom tickets. Users can now add multiple images and/or screenshots for better issue tracking and enhanced visual context from every angle.

Enhancements

Model Processing Optimizations: Overall running time for model processing has a notable speed boost (from 25% performance improvement subject to model properties), you might make Vin Diesel jealous with that extra horsepower.

Altair® PollEx™ for ECAD Now Available

7 November 2024

Altair, a global leader in computational intelligence, announced it is providing engineers access to advanced printed circuit board (PCB) verification tools at no cost with Altair® PollEx™ for ECAD. PollEx for ECAD empowers organizations to streamline design processes, enhance product quality from the earliest stages, and make smarter PCB design decisions. Available as a one-year free trial, PollEx for ECAD integrates seamlessly with all leading electronic computer-aided design (ECAD) tools.

“PolIEx for ECAD offers users incredible PCB verification capabilities at no cost, allowing them to integrate with leading ECAD tools and transform their PCB design workflows,” said Sam Mahalingam, chief technology officer, Altair. “This is a can’t-miss opportunity for teams and organizations responsible for designing and manufacturing PCBs. We encourage all users to try this software and discover its potential firsthand.”

PolIEx for ECAD – part of the Altair® HyperWorks® design and simulation platform – includes the core capabilities of Altair® PolIEx™, offering essential PCB verification tools that simplify design review, analysis, and early verification. Designed to deliver impactful functionality, PolIEx for ECAD empowers users to:

- Review designs, analyze, verify, and assess physical, logical, and electrical attributes early in the design life cycle.
- Detect potential manufacturing and electrical issues early in design to reduce design iterations and avoid costly rework.
- Identify issues and boost production yield with ECAD integration.
- Ensure seamless collaboration throughout the PCB development process.

Altair will present PolIEx for ECAD at the following events:

- Electronica 2024 (Hall A3, Booth 562), Munich, Germany, November 12-15
- PCB Carolina (Exhibitor Table #95), Raleigh, North Carolina, November 13

Eviden Launches Evidian Orbion: A Next-Generation, comprehensive Cloud-Based Identity and Access Management Solution

5 November 2024

Eviden, the Atos Group business leading in digital, cloud, big data and security announces the launch of Evidian *Orbion*, its next-generation Identity-as-a-Service (IDaaS) solution. Evidian Orbion integrates Identity Governance and Administration (IGA), Access Management (AM), and Privileged Access Management (PAM) into a single as-a-Service solution designed for hybrid environments. Evidian Orbion offers organizations a flexible, scalable way to manage identities and access rights, with a focus on efficiency and security.

Securing the extended enterprise

For several years, companies had structured themselves around an internal security perimeter, protected by firewalls and VPNs. Today, employees and third-party partners need to access business applications, that may run outside of companies’ internal perimeter, from a variety of locations outside the company’s internal network. This identity-first security paradigm introduces a new level of complexity for identity and access management. Evidian Orbion focuses on reducing IAM deployment complexity and strengthens deployments with capacities like self-enrolment and integration with Identity Proofing tools. Evidian Orbion is built to scale for mid-market and large organizations.

Meeting enhanced regulatory and sovereignty requirements

What's more, the regulatory landscape like the European NIS 2 Directive, for example, extends security requirements, requiring companies to further formalize their risk analysis policies, speed up the processing and disclosure of vulnerabilities, improve the handling of security incidents, define access control policies, and deploy strong authentication. Evidian Orbion offers a secure and compliant IAM foundation, for governing access controls and implementing multi-factor authentication. The solution provides advanced capabilities like identity proofing, decentralized identities (SSI), and a highly secure infrastructure designed with DevSecOps.

David Leporini, Director of IAM Cybersecurity Products & General Manager of Evidian, Eviden, Atos Group, said: *"Evidian Orbion simplifies IAM management by offering a cloud-native solution that reduces complexity and overhead for enterprises. In addition, the solution also provides essential IAM functionalities such identity governance and access management, all in a scalable and flexible SaaS model. With Orbion, enterprises can manage identities across applications securely, ensuring compliance while seamlessly scaling to meet evolving business needs."*

Martin Kuppinger, Principal Analyst & Co-founder, KuppingerCole Research said: *"Evidian Orbion is a powerful solution in the Identity Fabrics market segment. With its deployment model, it is targeted at mid-market and large organizations, providing them the flexibility they need. Also, with Evidian being a European vendor and IDaaS deployment from EU data centers, the solution is well positioned for serving the needs of EU-based organizations that mandate or prefer sovereign solutions with EU data residency, such as governmental agencies and critical infrastructure companies. "*

KeyCreator Technology Partner Adds Browser Extension

5 November 2024

One of KeyCreator's enduring strengths over the decades is the working flexibility to adapt in the moment for what your job calls for. With the intuitive efficiency of direct modeling and the capacity to deliver usable geometry from almost any CAD file, KeyCreator continues to provide outstanding performance for solving the problem at hand to keep projects moving.

So we are excited that one of our technology partners, CADENAS 3Dfindit, has something new that also helps CAD users keep projects moving efficiently. With their new CAD SCOUT 3Dfindit browser extension, they have made it easier than ever to quickly find component models you need for your design and bring that 3D data into your workspace. By allowing users to easily bring in precise models of common components through a simple web interface, these products keep users focused on the main problem-solving tasks of design without being delayed trying to account for a commonplace component.

Part of KeyCreator 2025

We were excited to announce that, in the upcoming release of KeyCreator 2025, CADENAS 3Dfindit has been further incorporated into the KeyCreator product family to make this process smoother for all our users.

New 3Dfindit CAD SCOUT

CAD SCOUT is a browser extension that can be downloaded from the Google Chrome or Microsoft Edge webstore (compatibility with other browsers is in the works). Once enabled, it provides simple, efficient interface for bringing any precise 3D models available from the website of a distributor or OEM directly into your CAD workspace.

Instead of having to search through a company's website to find where or if they make models available, 3Dfindit CAD SCOUT pulls that info forward in over 100 CAD, CAE, and BIM formats. All you have to do is drag & drop into your design! It can even be incorporated into a general search engine query for looking up a part or component. You can read more details about the release of this new technology on the CADENAS 3Dfindit website.

KeyCreator has always had a focus on empowering the individual CAD user with the flexible tools they need to solve their own unique modeling and engineering challenges, in the way they think works best. With the integration of CADENAS 3Dfindit into KeyCreator 2025, and with additional features like CAD SCOUT, we continue to bring forward innovations that give users greater flexibility and efficiency. If you aren't well acquainted how we've been doing that all these years, maybe it's time that you meet KeyCreator.

Nemetschek Group Unveils Cutting-Edge Innovations with Allplan 2025, Vectorworks 2025, and Archicad 28

5 November 2024

The Nemetschek Group, a leading global provider of software solutions for the AEC/O (architecture, engineering, construction, and operations) industry, announced the launch of three flagship products from its Design brands over the past weeks: Allplan 2025, Vectorworks 2025, and Archicad 28. These state-of-the-art releases underline Nemetschek's commitment to advancing digital transformation in the building sector through innovative, AI-powered tools as well as enhanced sustainability and collaboration features.

"The introduction of Allplan 2025, Vectorworks 2025, and Archicad 28 underscores our dedication to empowering architects, engineers, and designers with cutting-edge digital solutions. These products are not only about improving workflows but also about driving innovation and sustainability in the AEC/O industry," said Yves Padrines, CEO of the Nemetschek Group, on the parallel launch of the three flagship products. "We are providing our customers with a true choice. Our AI-powered tools and enhanced collaboration features will help professionals design more efficiently and sustainably, making a lasting impact on the future of construction and design."

Allplan 2025: AI-Driven Design for a New Era of Construction

Allplan 2025 introduces a new era of design and construction with AI-driven and automated tools that significantly enhance workflows for architects, engineers, and contractors. The software's cutting-edge artificial intelligence features and advanced modeling functionality automate repetitive tasks and streamline complex processes, enabling professionals to focus on creative and high-value work.

Key features of Allplan 2025 include real-time collaboration capabilities, bridging the gap between design and construction, and ensuring seamless coordination across teams. The software also introduces connected structural engineering workflows and advanced detailing tools, which allow users to deliver more productively. Allplan 2025 is poised to revolutionize how projects are executed, offering users the tools to bring their concepts to life faster and more accurately.

Vectorworks 2025: Interactive and Intuitive Design Tools for Enhanced User Experience

Vectorworks 2025 delivers a new suite of interactive features designed to empower designers with greater creative control and flexibility. The latest version introduces highly intuitive design workflows that enable professionals across the architecture, landscape, and entertainment industries to work smarter and more efficiently.

Key enhancements focusing on intuitive visualization and interactivity include Onscreen View Control for quick model navigation, Two-Point Perspective for easily creating architectural and photography perspectives, and Object Level Visibility for easily managing individual objects' visibility. Plus, the Vectorworks Cloud Document Reviewer streamlines the document review process for anyone from anywhere. The new version also highlights a more significant investment in entertainment products like Spotlight, Braceworks, and ConnectCAD to enhance workflow efficiency while maintaining quality, aiming to meet the specific needs of entertainment industry professionals.

Archicad 28: Meeting the evolving needs of architects, designers, and construction professionals

Archicad 28 offers a range of cutting-edge features, including enhanced collaboration tools, advanced automation, and optimized performance, all designed to streamline complex design processes and improve productivity. With improved cloud-based teamwork capabilities and integration with other leading industry tools, teams can collaborate seamlessly in real-time, ensuring projects stay on track from concept to completion.

A key focus of Archicad 28 is sustainability, empowering architects to design greener and better-performing buildings in less time with the help of AI and intelligent digital design solutions. These innovations make it easier for professionals to design and model sustainable buildings while meeting regulatory requirements. Archicad 28 sets a new benchmark for the future of BIM, aligning technology with the architectural community's goals of innovation, collaboration, and sustainability.

Driving Digital Innovation for a Sustainable Future

With the launch of these products, the Nemetschek Group continues to solidify its position as a leader in digital transformation, providing solutions that address the evolving needs of the AEC/O industry. Allplan 2025, Vectorworks 2025, and Archicad 28 are now available to users worldwide.

New PowderEase T1 Post-Processing System Streamlines Workflows and Creates Cost and Labor Efficiencies

7 November 2024

Stratasys Ltd., is collaborating with AM Solutions – 3D post processing technology, a brand of the Rösler Group, to launch Stratasys PowderEase™ TI, an innovative 3-in-1 post-processing solution designed for the Stratasys H350® SAF® powder bed printer. This new post-processing system drives towards important customer milestones, including shorter time to finished parts, more efficient powder use, and the ability handle the outcome of multiple printers at one time with a single T1 system. The PowderEase T1 will be manufactured at the German location of the Rösler brand AM Solutions - 3D post processing technology.

This groundbreaking automated powder handline solution combines multiple post-processing steps into a single, streamlined unit, significantly simplifying workflows, reducing operational costs, and improving overall productivity for users.

The new PowderEase T1 solution offers several key advantages to SAF users:

- **3-in-1 Functionality:** Automates powder breakout, retrieval, and dosing to minimize manual labor.
- **Scalable Efficiency:** A single system can comfortably serve up to six H350 printers, reducing the need for additional equipment and labor.
- **Timesaving:** Achieves up to 50 minutes of time savings per build compared to manual processes.
- **Powder Utilization:** Maximizes powder retrieval and efficiency, with reduced waste.
- **Consistent and ready to use parts with each build:** Automated powder handling and accurate dosing ensure traceability and cleanliness, adhering to strict industry standards.

“Working with AM Solutions, we're poised to deliver significant advancements that will benefit our customers and simplify work routines on the production floor,” said Birk Ploennigs, Director of SAF Product Management at Stratasys. “This solution will allow customers to use Selective Absorption Fusion® technology for production of parts, taking production efficiency to a new level.”

The partnership with AM Solutions marks a significant milestone in the advancement of additive manufacturing, addressing the growing demand for more efficient, user-friendly, and cost-effective production solutions, particularly in terms of automated post-processing needs.

“The key focus of the partnership between Stratasys and AM Solutions – 3D post processing technology is the delivery of maximum value to the market and to establish additive manufacturing as a primary production technology,” David Soldan, Head of AM Solutions – 3D post processing technology. “Automated post-processing, which ensures cost-effective, high-quality, and consistent results, is crucial to this objective. In collaboration with Stratasys, we are

excited to contribute our extensive experience and expertise in surface finishing and industrial-scale mechanical engineering to elevate additive manufacturing to the next level.”

To learn more about the PowderEase T1 post-processing system, and to see it unveiled, please go to the Stratasys Booth at Formnext, Hall 12.1, Booth D121 on Tuesday, November 19 at 3 p.m., CET. Also visit AM Solutions in Hall 11.1, Booth E41 to discover more post-processing solutions for Stratasys products

Siemens extends Veloce hardware-assisted verification and validation with new Innexis shift-left software

7 November 2024

Siemens Digital Industries Software announced today the Innexis product suite, a complement to its industry leading Veloce™ hardware-assisted verification and validation system.

Building on the success and rapid adoption of Veloce, Siemens’ Innexis product suite delivers a set of capabilities to address customer demand for shift-left software in the early phases of IC development. These products include a hardware/software development flow from virtual to hybrid to full RTL, an architecture native virtual platform for early high-speed software development and a simulation backplane that enables the development of digital twins in Siemens’ PAVE360™ software for software-defined vehicles and other complex systems.

“The complexity of integrated circuits (IC) is increasing exponentially, designers need more efficient methodologies to meet industry demands. Veloce has seen rapid adoption by industry leaders to help solve this critical bottleneck. The Innexis product suite extends workflow improvements from Veloce to help our customers shift left their IC development and debug cycle,” said Jean-Marie Brunet, vice president and general manager, Hardware-Assisted Verification, Siemens Digital Industries Software. “This enables IC design to begin months before final RTL, all while using a common software workload across the development process.”

Adoption of a shift-left approach for software development and IP verification processes is now mandatory. As chip designs become increasingly complex due to more demanding software workloads, it is critical to enable the development and execution of realistic workloads early in the design phase. A proactive shift-left software approach helps mitigate the risk of identifying issues late in the development cycle.

“The implementation of Innexis in our development process has significantly enhanced software and system validation performance, thereby improving the efficiency of our teams and projects. By enabling heterogeneous component modeling within virtual platforms, it allows us to create realistic high-speed models of System on Chips (SoCs),” said Ari Hautala, Principal System Architect, Nokia Mobile Networks. “Furthermore, the integration of these high-speed virtual platforms with RTL IP on Veloce emulators facilitates superior overall performance while still permitting precise cycle-accurate performance and power analysis on RTL model components. Additionally, Innexis offers exceptional visibility and debuggability for the SoC design, along with the capability to integrate and execute a large number of complex test cases effectively.”

Currently, the Innexis product suite consists of:

Innexis Developer Pro: Innexis Developer Pro software provides a connected development flow from virtual to hybrid to full RTL. This provides a comprehensive environment for accelerating the creation of complex SoC design supporting a wide range of use-cases including seamless hardware-software co-development, co-validation, and pre-silicon cycle accurate analysis and validation. Innexis Developer Pro supports the modelling of complex SoC's with heterogeneous cores and custom SystemC model components. In addition, it provides the ability to run in both virtual plus RTL hybrid mode for high performance execution, and then at a time of interest switch to full RTL emulation enabling high accuracy analysis of the full SoC when required.

Innexis Architecture Native Acceleration (ANA): Innexis Architecture Native Acceleration software is a cloud-based high-speed virtual platform. By running natively on Arm based servers the software workloads run at much higher speeds than on typical instruction set simulation based virtual platforms. Cloud hosting also provides scalable compute resources and simple browser-based access and tools. Innexis Architecture Native Acceleration can also run on local Arm based servers if preferred. In both cases it enables early software development and testing, and early software defect identification.

Innexis Virtual System Interconnect: Innexis Virtual System Interconnect software facilitates the creation and simulation of comprehensive system level digital twin platforms by seamlessly connecting multi-behavioral virtual and physical subsystems, supporting a variety of communication protocols. Innexis Virtual System Interconnect behavioral models can include Innexis Developer Pro or Innexis Architecture Native Acceleration SoC models, supporting system-level shift-left software development and RTL verification.

Siemens' Tessent In-System Test software enables advanced, deterministic testing throughout the silicon lifecycle

5 November 2024

Siemens Digital Industries Software introduced Tessent™ In-System Test software, a groundbreaking design-for-test (DFT) solution that enhances in-system test capabilities for next generation integrated circuits (ICs).

Engineered to address critical challenges like aging and environmental factors, which can lead to Silent Data Corruption or Errors (SDC/SDE), Tessent In-System Test is the industry's first in-system test controller designed specifically to work with Siemens' industry-leading Tessent™ Streaming Scan Network software. This compatibility enables customers to apply embedded deterministic test patterns in-system throughout a product's lifecycle, which can help keep their ICs and the applications they power reliable, secure, and fully functional.

"Tessent In-System Test is a major step forward in helping our customers achieve their Silicon Lifecycle Management goals," said Ankur Gupta, senior vice president and general manager, Digital Design Creation Platform, Siemens Digital Industries Software. "Aging and environmental factors are impacting today's designs at a greater rate. Tessent In-System Test delivers smart

solutions that address these challenges, ultimately providing customers improved performance, security and productivity.”

Building on the success of Siemens’ Tessent™ MissionMode technology and Tessent Streaming Scan Network (SSN) software, Tessent In-System Test allows for seamless integration of deterministic test patterns generated with Siemens’ Tessent™ TestKompress™ software. It enables customers to reuse existing IJTAG- and SSN-based patterns for in-system applications while improving overall chip planning and reducing test time.

Siemens’ Tessent In-System Test software allows customers to apply embedded deterministic test patterns generated using Tessent TestKompress with Tessent SSN directly to the in-system test controller via industry-standard APB or AXI bus interfaces. Deterministic test patterns applied in-system provide the highest level of test quality within a pre-defined test window, as well as the ability to change test content as devices mature or age through their lifecycle. In-system test with embedded deterministic patterns also supports re-use of existing test infrastructure. These capabilities are particularly key for industries focused on safety-critical applications such as the automotive, aerospace, and medical devices spaces.

“Tessent In-System Test technology allows us to reuse our extensive test infrastructure and patterns already utilized in our manufacturing tests for our data center fleet,” said Dan Trock, senior DFT manager at Amazon Web Services (AWS). “This enables high-quality in-field testing of our data centers. Continuous monitoring of silicon devices throughout their lifecycle helps to ensure AWS customers benefit from infrastructure and services of the highest quality and reliability.”

Stratasys H350 Now Powered by New SAF ReLife Solution Capable of Repurposing Waste PA12 Powder as Sustainable Additive Manufacturing Production Parts, at Scale

6 November 2024

Stratasys announced the launch of SAF ReLife™, an innovative software-based solution that transforms waste PA12 powder from other additive manufacturing (AM) technologies into high-quality parts.

The SAF ReLife solution can efficiently repurpose waste PA12 powder from powder bed fusion printers, including high-speed sintering, SLS (selective laser sintering) and jetting build processes for use within the Stratasys H350 printer. This sustainable solution helps customers produce high-quality surface finished parts with powder that otherwise considered waste. This new technology can significantly lower the cost-per part for customers; improve their material efficiency; and reduce their overall carbon footprint per build.

"SAF ReLife gives customers a unique ability to make high-quality parts with powder considered waste from other polymer powder bed fusion processes," said Neil Hopkinson, Vice President, Additive Manufacturing Technology, Stratasys. "Our patented unidirectional print-and-fuse architecture and thermal control uniquely enable this capability at production volumes."

Wehl Green, a leading service bureau, beta tested SAF ReLife by utilizing their SLS waste to their SAF ReLife. The company reported significant savings of 20 percent in total cost per part and a substantial reduction in waste by turning unused powder into functional parts through a repeatable process using SAF technology. In addition, Wehl Green has been able to turn around new parts and have them delivered within 48 hours for customers, helping them meet demand.

"By utilizing the SAF ReLife technology, we've cut production costs while producing parts that meet strict industrial specifications. It's a game-changer for our competitiveness," said Javier García, Manager and Co-founder, Wehl Green. "Thanks to Stratasys' SAF ReLife project, we've been able to turn PA12 waste into high-quality parts. This circular economy approach has reduced our environmental impact while maintaining top-tier product standards."

SAF ReLife is a breakthrough in making additive manufacturing more sustainable, and eco-friendly by addressing a common challenge of what to do with aged powder. To determine the environmental impact, Stratasys partnered with Fraunhofer IPA to conduct a third-party Life Cycle Assessment (LCA) to validate the environmental benefits of SAF ReLife. The study revealed that repurposing PA12 waste from powder bed print processes in SAF production can reduce carbon footprint up to 89%, compared to standard production with polyamide 12 material.

"Our life cycle assessment demonstrates that Stratasys' SAF ReLife PA12 solution can reduce the carbon footprint of the reference print job by 43% with the German electricity mix and by as much as 89% when powered by renewable energy sources, compared to standard PA12," said Chantal Rietdorf, M.Sc., Research Associate at Fraunhofer.