

PLM Weekly Summary

Editor: CIMdata News Team 12 June 2020

Contents

CIMdata News	2
CIMdata to Host Free Webinar on Systems Modeling and Simulation	$-\frac{1}{2}$
CIMdata Publishes Executive PLM Market Report	$\frac{2}{3}$
CIMdata Publishes Global CAM Market Analysis Report	4
Siemens Introduces Workplace Distancing Solution (Highlight)	5
Acquisitions	6
Saratech Acquires Apex DMS Inc., a Siemens PLM Software Business from Sconce Group	- 6
Synopsys Acquires Semiconductor Analytics Innovator Qualtera	0
Company News	7
Answe Laurahas Art of Simulation Image Competition	- 7
Federal Government of Germany and CONTACT test innovative energy systems	/
HCL Technologies Partners with iBASEt to Expand Industry 4.0 in the Aerospace and Defense Industry	
Honeywell and SAP Partner to Improve Building Performance with Integrated, Cloud-Based Business ar	
Operational Technology Data	9
Infor and Elvenite Expand Cooperation in Nordic Food Industry	10
Introducing OPENBOM Partner – RAZORLEAF	11
Lantek brings one of the most cutting-edge Euromac robots in the punching machine industry to life	12
Mentor joins the O-RAN ALLIANCE to help drive interoperability requirements for 5G network silicon	13
Nemetschek - Safe Workplaces for Returning Office Workers	13
PTC Extends Alliances with Rockwell Automation and Microsoft to Accelerate Value of Digital	
Transformation for Manufacturers	_14
SAP Joins Open COVID Pledge and Provides Access to Patents to Fight COVID-19	_15
Wipro Extends Partnership with VMware to Deliver BoundaryLess Enterprise Solution	_16
Wipro and IBM collaborate to help clients accelerate their cloud journeys	_16
Events	17
Bentley Systems Year in Infrastructure 2020 Conference is Going Digital	17
Mastercam Plans Demonstrations of Latest CAD/CAM Software at IMTS 2020	18
Financial News	19
Atos publishes its 2019 Integrated Report and paves the way for a more responsible era	19
Autodesk, Inc. Announces Move To Virtual Annual Meeting Of Stockholders	20
AVEVA Group PLC Announces its Results for the Year Ended 31 March 2020	_20
Implementation Investments	21
Aluminum Producer Novelis Extends Use of Dassault Production Planning and Scheduling Solution to	
Plants in US and Brazil	21
FPS Apparel Empowered to Produce 10,000 Protective Masks Per Week	22
Free ALPHACAM Licence Helps Codem Produce Urgent PPE	23
VT Garment Cuts Time to Market by 20% with Centric Manufacturing PLM	24
Product News	24
Ansys and Electro Magnetic Applications Partner to Deliver Design-to-Validation Workflow for Cable	
Harnesses	24
APRIORI Launches New Cost Insight Generate Solution	25
Companies Embrace Onshape, the Only Pure SaaS Product Development Platform	26
Copyright © 2020 by CIMdata. Inc. All rights reserved.	

Copyright © 2020 by CIMdata, Inc. All rights reserved.

CIMdata, Inc. 3909 Research Park Drive Ann Arbor, Michigan 48108 Tel: +1 (734) 668–9922 Fax: +1 (734) 668–1957 E-mail: info@CIMdata.com Web: http://www.CIMdata.com

DATADVANCE Releases an AI-powered Cloud Solution pSeven	27
· · · · · · · · · · · · · · · · · · ·	28
Hexagon -Advances in simulation enable optimal use of composites	29
PTC Launches Windchill 12 Version of its PLM Software	30
PTC to Advance Industrial IoT Across the Enterprise with ThingWorx 9.0	31
Rockwell Automation and PTC Enhance FactoryTalk InnovationSuite to Simplify Digital Transformation	33
Synopsys Delivers Complete Workflow for Automotive Lighting Design and Visualization in CATIA	33
Variantum releases VariCPQ Basic for Salesforce	_34

CIMdata News

CIMdata to Host Free Webinar on Systems Modeling and Simulation

10 June 2020

CIMdata, Inc., the leading global PLM strategic management consulting and research firm, announces an upcoming free educational webinar, "Systems Modeling and Simulation: An Introduction." The webinar will take place on Thursday, 9 July 2020, at 11:00 a.m. (EDT) and will last for one hour.

Innovation leaders realize that accurate and accessible data is the foundation for insight and inspiration. It is also critical to recognize that the surrounding ecosystem must be brought into play and linked appropriately. This combined structure is foundational to defining and achieving sustainable innovation. In this webinar, participants will learn about Systems Modeling and Simulation (SMS) and the current market trends and significant business challenges associated with simulation. Digital transformation, including its needs for making the case to adopt systems modeling and simulation, will also be considered.

This webinar will help attendees:

Understand how to achieve sustainable innovation in a modern fast-paced and complex engineering environment.

Learn about the development challenges that lead to a simulation-driven systems engineering environment.

Understand the value of systems engineering.

Learn what is needed to deploy SMS.

Find out how SMS is related to the digital transformation of businesses.

According to Don Tolle, CIMdata's Simulation-Driven Systems Development Practice Director, "The complexity of today's interconnected cyber-physical systems operating in the context of digital transformation requires the adoption of systems thinking throughout an entire organization and across the entire product lifecycle. Most companies today exhibit relatively low levels of maturity in their systems engineering processes and in the adoption of best practices necessary to achieve the business benefits of model-based engineering. To maintain a leadership role within their respective industries, companies must strive for a simulation-driven, systems innovation approach, moving well beyond traditional product development silos of domain knowledge."

This webinar will be useful to a broad audience, including engineering executives, senior and middle managers responsible for simulation-driven projects, CAE and systems engineering SMEs and

practitioners, IT support analysts for engineering, and anyone involved in digital transformation and simulation-driven systems engineering.

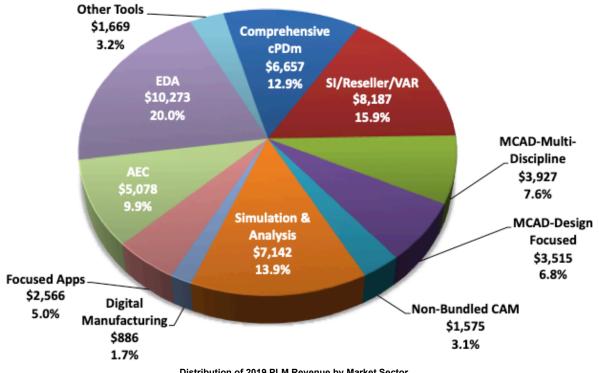
To find out more, visit: https://www.cimdata.com/en/education/educational-webinars/webinar-systemsmodeling-and-simulation-sms-an-introduction. To register for this webinar, please visit: https://register.gotowebinar.com/register/6912594821382433538

1Click here to return to Contents

CIMdata Publishes Executive PLM Market Report

11 June 2020

CIMdata, Inc., the leading global PLM strategic management consulting and research firm announces the release of the CIMdata 2020 Executive PLM Market Report. This report provides an executive-level view of CIMdata's comprehensive analysis of the PLM market, with summary charts on the overall market and on specific PLM solution segments (including the chart below). It also includes perspectives on current trends in the PLM industry and how they may affect current suppliers and investments.



Distribution of 2019 PLM Revenue by Market Sector

The PLM Economy, as measured in our PLM market analysis, has continued to grow. In calendar year 2019, the PLM market grew to \$51.5 billion overall (7.7% growth over 2018). "The PLM market saw solid growth in 2019, just under our forecast," according to Mr. Stan Przybylinski, CIMdata's Vice President. "Architecture, Engineering and Construction (AEC) led the pack with a year-on-year growth of 18.9%, driven largely by Autodesk's 30% year on year growth in their AEC business. Autodesk's results also contributed to strong growth in MCAD Design-Focused (MCAD-DF) at 8.6%. Finally, simulation and analysis (S&A) had another great year at 10.5%. We expect the move toward smart, connected products to continue growth in S&A, software development tools, and electronic design automation (EDA)."

This report is the first of five modules of the CIMdata 2020 Market Analysis Report Series to be released. The MAR Series provides detailed information and in-depth analysis on the worldwide PLM market during calendar

year 2019. It contains analyses of major trends and issues; revenues of leading PLM providers; and revenue analyses for geographical regions, industry sectors, and historical and projected data on market growth.

The CIMdata PLM Market Analysis Report Series is packaged as five modules:

- 1. The *CIMdata 2020 Executive PLM Market Report* provides an overview of CIMdata's complete global analysis. It includes key charts on PLM market investment statistics through 2019, forecasts of investments for 2020 through 2024, and a summary of PLM solution providers' performance in 2019.
- 2. The *CIMdata 2020 PLM Industry Review and Trends Report* is mainly qualitative in nature, and focuses on key issues facing the global PLM Ecosystem of solution providers and end user organizations. It highlights changes that occurred in 2019, what effects those changes may have in the short and medium terms, and what is on the horizon in the years to come.
- 3. The *CIMdata 2020 PLM Market and Solution Provider Analysis Report* details measures of and forecasts for the overall PLM market and its key segments in 2019, including Tools, cPDm, and Digital Manufacturing. The Tools section has additional details on sub-segments, including MCAD, NC, S&A, EDA, and AEC. It also includes CIMdata's estimates of PLM solution provider revenues in these segments and sub-segments for 2020 through 2024.
- 4. The *CIMdata 2020 PLM Market Geographic Analysis Report* provides an additional view of the 2019 market results, by major geography. CIMdata's 2019 estimates and market forecasts for PLM and the major PLM market segments are provided for the Americas, EMEA, and Asia-Pacific. In addition, the report includes estimates and forecasts for the cPDm segment within specific European and Asia-Pacific countries and regions.
- 5. The *CIMdata 2020 PLM Market Industry Analysis Report* provides an industry segmentation view of the 2019 market results. CIMdata's 2019 estimates and market forecasts for PLM and cPDm are provided for ten industry sectors: aerospace and defense, automotive and other transportation, electronics/telecommunications, fabrication and assembly, process-packaged goods, process—petrochemical, utilities, construction, infrastructure, and shipbuilding.

The CIMdata PLM Market Analysis Report Series is available as a five-module set or each module can be purchased separately. Portions are also available as part of the CIMdata Community Memberships. Further details and pricing information about the report and Community Memberships are available at www.cimdata.com.

CIMdata Publishes Global CAM Market Analysis Report

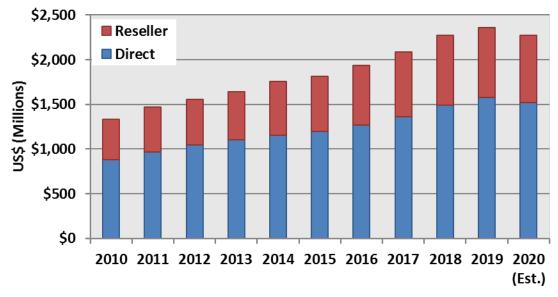
10 June 2020

CIMdata, Inc., the leading global PLM strategic management consulting and research firm announces the release of the 2020 CIMdata CAM Market Analysis Report (MAR), the twenty-eighth annual study of the global Computer-Aided Machining (CAM) market. CIMdata estimates that based on end-user payments, the worldwide CAM software and related services market grew by 3.9% in calendar year 2019. The estimated end-user payments grew from just under \$2.3 billion in 2018 to nearly \$2.4 billion in 2019. According to Mr. Stan Przybylinski, CIMdata's Vice President, "The CAM results at the end-user level were lower in 2019 than their historical range of 5 to 7% growth. There has been weaker growth in machine tools for two consecutive years which could be inhibiting new investments in new CAM software." CIMdata projects that in 2020 the CAM market, and the entire PLM Economy, will be strongly impacted by the COVID-19 pandemic. CIMdata estimates end-user payments for CAM software will decrease by 3.7% to just under \$2.3 billion.

Since 2002, the CAM software market has shown modest but steady growth as global economies generally improved. There has been worldwide growth in the sale of machine tools and manufacturing output; greater emphasis has been placed on the efficient operation of machine tools as manufacturing firms have strengthened their competitive positions; and the overall PLM (Product Lifecycle Management) market, of which CAM software is a component, has continued on a strong growth path during this period. CAM software purchases are related to all of these factors—particularly machine tool sales.

The size and growth of the CAM software and related services market based on end-user payments is shown in the chart below. It can also be seen that approximately one-third of the end-user payments are reseller revenues and approximately two-thirds of the payments are made directly to software suppliers.

The 2020 version of the CAM MAR is a 111-page report containing 22 charts and 39 tables of data detailing the worldwide CAM market along a number of dimensions. It also includes a discussion of trends in the CAM industry and updates on the top CAM solution providers. The 2020 CIMdata CAM Market Analysis Report is available for purchase at: <u>http://www.cimdata.com/en/research/plm-market-analysis-report-series</u>.



1 Click here to return to Contents

Siemens Introduces Workplace Distancing Solution (Highlight)

09 June 2020

Helping manufacturers simulate and manage employee exposure risks while enabling productivity

Recently, Siemens Digital Industries (Siemens) announced a new solution that enables companies to quickly and efficiently model how employees interact in proximity to one another, and how it may impact the production line and plant design. The new solution also enables organizations to build an end-to-end digital twin to simulate worker safety, iterate on and optimize workspace layouts, and validate safety and efficiency measures to help future-proof production lines.

Siemens developed the solution using the following products:

- Siemens' SIMATIC Real Time Locating Systems (RTLS)
- Siemens' Trusted Traceability Application on MindSphere
- Siemens' Tecnomatix Process Simulate and Plant Simulation

As part of this solution, SIMATIC RTLS transponders are embedded in badges worn as personal protective equipment to track when employees are at risk, e.g., when employees are within 6 feet of one another the badges will display an alert. Data collected over time can be analyzed to identify "hot spots" where risk scenarios occur frequently. Using the collected data, new manufacturing layouts and/or workflows can be simulated using Tecnomatix until one is determined to provide the desired outcomes, which can then be implemented in the physical operation. The Trusted Traceability Application can be used to perform comprehensive contact analysis in the event of an actual workplace illness. All movement and contact with the affected employee can be visualized, enabling rapid notification of those who came into close contact, and enabling selective deep cleaning of exposed physical environments, eliminating the need for more widespread cleaning.

Mr. Raj Batra, President of Digital Industries for Siemens USA, stated "our solution consists of proven technologies that can begin delivering results for most manufacturers in one to two weeks."

CIMdata is very pleased and excited to see Siemens create and deploy a solution designed to help manufacturing enterprises create safer work environments and be able to improve their overall production efficiency. These types of offerings were suggested in CIMdata's recent Webinar on the impacts of COVID-19 on the PLM Economy and we are happy to see Siemens create one so quickly. We think this is a very positive step to help companies move forward in returning to productive operations while improving and managing the safety of their most valued resources—their employees.

1 Click here to return to Contents

Acquisitions

Saratech Acquires Apex DMS Inc., a Siemens PLM Software Business from Sconce Group

08 June 2020

Saratech announced the acquisition of Apex Digital Manufacturing Solutions, Inc. (Apex), a PLM software provider, from the Sconce Group effective June 2, 2020. Saratech will take over all of Apex's PLM software license and subscription sales, support services, and training classes.

The Apex acquisition is directly in line with the long-term strategy of Saratech to expand the company's footprint as a premier engineering company providing services, PLM software, and manufacturing support throughout the United States. Customers will benefit from bolstered PLM software and support resources, ensuring the highest quality of service from Saratech.

"Saratech's acquisition of Apex is a win for both the Apex and Saratech customers," said Craig Radomski, Siemens VP, America's Channel. "Saratech, a consistently top-performing Siemens partner, has an outstanding technical team which will now become even better with the addition of the Apex engineers."

This key acquisition strengthens Saratech's presence in the Northeast and Midwest regions of the U.S. "We continue to build on our ability to support clients with all their engineering needs; from basic design support to their drive to Industry 4.0 and adoption of the Digital Twin," said Saeed Paydarfar, CEO, Saratech. "Today, more and more customers understand the criticality of having a strong PLM implementation to be competitive in industry."

1 Click here to return to Contents

Synopsys Acquires Semiconductor Analytics Innovator Qualtera

11 June 2020

Synopsys, Inc. announced it has acquired Qualtera, a fast-growing provider of collaborative highperformance, big data analytics for semiconductor test and manufacturing. Qualtera's advanced analytics technology, combined with the industry-leading Synopsys Yield Explorer® design-centric yield management solution and Synopsys TestMAXTM test automation solution, provides the foundation for improving the process of using silicon measurements to guide improvements throughout a device's development and manufacturing lifecycle. This unique combination enables a post-silicon optimization solution that is key to maximizing efficiencies from design all the way to device shipment.

The terms of the deal, which are not material to Synopsys' financials, are not being disclosed.

"Maximizing our customers' success in highly competitive industries requires that both the pre-silicon and post-silicon phases of the silicon lifecycle are fully optimized, and our goal is to provide an end-toend solution to make it more achievable for our customers," said Sassine Ghazi, general manager, Design Group at Synopsys. "Synopsys' acquisition of Qualtera underscores our commitment to deliver post-silicon optimization solutions that address the evolving needs of the dynamic semiconductor industry."

Early in the device lifecycle, the analysis of silicon data enables improvements in design modeling parameters to be used in subsequent design iterations or in future designs in the same technology node. Later in the lifecycle, analytics correlating design information with detailed test result data can be used to improve product yield ramps during manufacturing. The Synopsys Yield Explorer solution enables the identification of systematic yield limiters due to interactions between the manufacturing process and physical design characteristics. Combining the strengths of Yield Explorer with Qualtera's high-performance analytics enables faster results and the ability to analyze larger volumes of data for even greater accuracy.

Analytics can also drive significant improvements on the production test floor. Intelligent analysis of manufacturing and test data can drive specific actions to increase the efficiency of the test process. Qualtera's analytics and production control capabilities provide a perfect complement to Synopsys' industry-leading TestMAX test automation family. Working together these solutions enable the application of more efficient tests and more accurate failure screening, helping customers to achieve the lowest possible test costs, while ensuring the highest possible shipped product quality.

1<u>Click here to return to Contents</u>

Company News

Ansys Launches Art of Simulation Image Competition

10 June 2020

To help commemorate its 50th anniversary, Ansys is celebrating the achievements of its customers and student community with the inaugural Art of Simulation image competition. The contest will spotlight striking, eye-catching simulation designs and provide a glimpse into how Ansys users leverage simulation as a virtual superpower to create the next generation of innovative products.

Ansys users are invited to submit designs created with Ansys simulation solutions in 16 categories spanning critical areas of physics, including fluids, electromagnetics, optical, systems, 3D design, structures, semiconductors, embedded, multiphysics and more. A panel of Ansys judges will choose the top 10 entries in each category to compete in the semifinals. Those submissions will advance to a dynamic second round of voting — a public-facing online voting site — where global Ansys users will evaluate entries based on the uniqueness and usefulness of the simulation's application and its visual impact.

The winning images will be showcased on the Ansys website, News Center and social channels. They may also be featured in upcoming Ansys digital campaigns and in Ansys publications. Winners will receive a distinguished trophy that honors their accomplishment and a digital badge.

"For five decades, engineers have relied on Ansys simulations as their go-to superpower for tackling highly-complex design challenges," said Lynn Ledwith, vice president of marketing, Ansys. "This contest provides users with a fantastic opportunity to demonstrate that their work is not only a cutting-edge technical achievement, but also artistic, imaginative and beautiful."

Simulations captured in high-resolution images may be submitted between June 10, 2020 and October 2, 2020 at 5 p.m. EDT. Public voting begins at 8 a.m. EDT on October 19, 2020 and closes at 5 p.m. EST on November 13, 2020. Winners will be notified in early December 2020.

1 Click here to return to Contents

Federal Government of Germany and CONTACT test innovative energy systems

11 June 2020

Together with renowned partners, CONTACT is proving new technologies for an efficient and sustainable energy supply as part of the German government's 7th Energy Research Programme. The Wind I0 project uses CONTACT's IoT platform for the digitalisation and autonomous control of wind turbines and wind farms.

Germany has the goal of becoming climate neutral by 2050. Wind power is a key factor here. In many other countries, too, wind energy ensures low CO2 and sustainable energy production. For an economically viable energy supply, it is therefore of great importance to further increase the yields of wind turbines while reducing maintenance costs.

A key technology for this is the Digital Twin, the potential of which the industry is far from exhausting. The ideal scenario is wind turbines and wind farms that determine their maintenance requirements themselves and independently optimise their operating parameters. For example, they can automatically adapt to site-specific and constantly changing weather conditions. In addition, they are able to use their plant status, the currently available service resources and the operation model for an optimal management.

To achieve this goal, the Wind I0 joint project, funded by the Federal Ministry of Economic Affairs and Energy (BMWi), brings together renowned partners from the wind energy sector. The project uses CONTACT Elements for IoT with its data models and methods for Digital Twins to explore concrete use cases. One example is the combination of the wear models of sensitive components with the Digital Gemini to extend their overall lifetime and improve preventive maintenance. The IoT platform provides developers, operators and service technicians with the relevant operating information in a clear and concise manner.

The joint project is coordinated by the Institute for Integrated Product Development at the University of Bremen and managed by Forschungszentrum Jülich.

1 Click here to return to Contents

HCL Technologies Partners with iBASEt to Expand Industry 4.0 in the Aerospace and Defense Industry

11 June 2020

HCL Technologies (HCL) announced its partnership with iBASEt, a leading provider of manufacturing, quality and sustainment solutions to support greater scaling of operations to serve growing needs of complex discrete manufacturing industries.

The partnership will address the growing needs of the Aerospace and Defense industry undergoing a digital manufacturing transformation, including Connected Factory processes. Working together, iBASEt and HCL Technologies can accelerate digital transformation initiatives by simplifying the implementation of advanced technologies in operations. HCL can leverage iBASEt's digital suite of solutions designed to address the needs of businesses operating in complex, highly regulated discrete manufacturing industries.

To enable smart manufacturing transformation in the Industry 4.0 era, it is critical to connect, optimize and create value from. HCL's ExPAND 4.0 framework enables to build a connect and collaboration between siloed Engineering, Manufacturing and Aftersales functions and creates of value for varied stakeholders.

HCL's strong engineering DNA coupled with Consulting-led, Technology-driven and Implementationfocused approach uniquely positions it to help businesses like iBASEt make best out of their industry 4.0 initiatives. An iBASEt solution implemented by HCL offers the best of both worlds – best-in-class software with an implementation partner that is actively driving digital innovation across the Aerospace and Defense manufacturing industry

1Click here to return to Contents

Honeywell and SAP Partner to Improve Building Performance with Integrated, Cloud-Based Business and Operational Technology Data

12 June 2020

Honeywell and SAP SE announced that they have teamed up to create a joint cloud-based solution based on Honeywell Forge, the company's enterprise performance management offering, and SAP Cloud Platform that will streamline and combine operational and business data to support better decisionmaking and drive greater efficiencies.

Honeywell Forge and the SAP Cloud for Real Estate solution will provide corporate real estate owners and building operators with aggregated financial and operational intelligence for their portfolios

The solution will enable customers to benefit from building performance optimization, including reduced carbon footprint and lower energy costs, as well as improved tenant experience

A powerful, intuitive dashboard will be powered by both companies' cloud platforms and will guide owners on real-time key performance indicators, including how sustainable the building is

The companies' first area of focus will be the real estate industry, where building owners often need to pull data from disparate sources that are not normalized. This makes it extremely difficult to determine the true efficiency and utilization of their portfolios.

Drawing on the power of the Honeywell Forge autonomous buildings solution and the SAP Cloud for

Real Estate solution, the new offering will enable facility managers and building owners to reposition their portfolios through cost savings and newly identified efficiencies, while also helping to improve tenant experience. Honeywell Forge powers a new AI-driven autonomous control capability that makes automatic adjustments to maintenance, comfort and sustainability.

As buildings come back online in the midst of the COVID-19 pandemic and economic crisis, owners are expected to focus on key performance indicators (KPIs) tied to enhanced occupant safety and reduced carbon footprint along with energy savings. By providing real-time access to these KPIs, the joint offering will help building owners optimize their operations to meet aggressive energy savings targets and substantially reduce maintenance hours. For example, in the HVAC operation alone, which is known to account for 35 percent of total energy consumption* in commercial buildings, an AI-automated system such as Honeywell Forge can save up to 23 percent in energy costs.**

"Building owners today often struggle to get the real-time data they need to determine the true efficiency and utilization of their portfolios," said Darius Adamczyk, chairman and CEO, Honeywell. "Honeywell and SAP together will provide insights from the boiler room to the boardroom that make it easier for our customers to get a true picture of how to optimize building performance, lower carbon emissions to meet sustainability goals, reduce energy costs and help enhance occupant experience. Having this information readily accessible will allow our customers to generate tremendous business value while becoming more sustainable, and it will greatly enhance the appeal of their buildings to renters and tenants."

"Our partnership will significantly change the game in digital and intelligent real estate management," said Christian Klein, CEO, SAP. "Customers will greatly benefit from the single holistic view provided by our offering dashboard. With the addition of Qualtrics, companies can also collect employee sentiment data to provide a complete 360-degree experience measurement while optimizing occupant productivity, building performance and their entire real estate portfolio. With embedded artificial intelligence and data analysis, our solution will enable managers to determine their optimal office use and adjust their portfolios to reflect varying economic, environmental and regulatory conditions."

The solution from Honeywell and SAP will provide customers with easy access to a wider range of pertinent real estate data, including energy performance, security, maintenance, rent, taxes, location, regulations, lease terms and other costs. The solution will include:

Predefined extensible dashboards combining information technology and operational technology KPIs, leveraging artificial intelligence

Monitoring and reduction of annual energy spend, resulting in reduced carbon footprint and greater energy efficiency, even as maintenance hours decrease

A harmonized data architecture that connects building data from Honeywell with real estate and financial data from SAP

Combined human comfort KPIs with measured experience KPIs

1 Click here to return to Contents

Infor and Elvenite Expand Cooperation in Nordic Food Industry

09 June 2020

Infor announced it has deepened its collaboration with alliance partner Elvenite. Elvenite will deliver a combination of modern technology and successful, reliable implementations for food producers and the grocery trade in the Nordics based around Infor CloudSuite Food & Beverage.

"The collaboration with Infor gives us access to the latest technology. This means we can combine

Infor's industry-specific CloudSuite with our knowledge of the food industry's challenges, business and business processes, a combination that is extremely valuable for our customers," says Mathias Dyberg, CEO of Elvenite.

Infor and Elvenite have worked together since 2009. The in-depth collaboration with Infor is a strategic part of Elvenite's growth plan, with the goal to double turnover in three years. This joint offering has already produced results as when they recently won a tender in Norway together.

"Digitization is a crucial weapon when companies compete in competitive markets, as the food industry does," says Johan Made, Infor's general manager and executive vice president for north, west and east Europe. "Competition is getting tougher each day and, in the strengthened collaboration with Elvenite, we can help customers in the food industry make smart decisions that strengthen their competitiveness."

Elvenite was founded in Karlstad in 2007 with a clear focus on the food industry that has won the trust of a number of national and international brands. One of these is Mowi, a world-leading producer of farmed Atlantic salmon and fish products with nearly 15,000 employees in 25 countries.

Pointing to the benefits of the increased cooperation between Infor and Elvenite, Jörn Berg, group IT applications manager at Mowi, said: "This is the best of both worlds. Elvenite has unique knowledge and experience of successful implementations of Infor's products in the food industry. With their help, we have developed a global platform that we can now roll out to all our units around the world. The delivery exceeds our high expectations, both in terms of quality and results."

Elvenite was founded in 2007 and is driven by the vision to be a leader in the digitization of the food industry and the grocery trade. The company has 70 employees in Karlstad, Stockholm, Oslo and Malmö, and has sales of just over SEK 100 million. Since 2018, Elvenite has been owned by Combined Excellence, a group with a number of specialist companies in IT and digitalization. Read more at www.elvenite.se

1Click here to return to Contents

Introducing OPENBOM Partner – RAZORLEAF

09 June 2020

Earlier this year, we announced a partnership program at OpenBOM for consulting and online services. We have seen the work moving online gradually for the last several years. The last few months of the COVID-19 pandemic demonstrated a huge demand for online services. By introducing the OpenBOM SaaS application, we realized that there is a real opportunity not only to develop software but also to provide education, help to set up, configure, and customize software online.

For the last few months, we've been growing the list of OpenBOM partners worldwide. You can see the list of current consulting partners here, but we are growing the number of partnerships and you will see new names there soon.

Today, I want to introduce one of our partners – Razorleaf. For the last two decades, Razorleaf became a household name for many companies in the U.S. implementing Product Lifecycle Management, providing training, PLM implementation and custom services.

Razorleaf was founded in 2000 with a goal to provide deep technical expertise that helps design engineering teams develop better products faster, cheaper, and more efficiently. We have been a driving force in the evolution of CAD as it has become a set of broader applications called Product Lifecycle Management (PLM). With thousands of projects under our belt, we've learned the pitfalls and nuances of the various platforms. We take exceptional pride in how we help bridge the gap between tough business problems and the technologies that support them.

Razorleaf provides a set of dedicated services for OpenBOM customers starting from initial training and setup, later moving to custom development and special integrations. Please navigate here to check more about what services Razorleaf provides for OpenBOM customers.

Regardless of your company size, OpenBOM and Razorleaf can connect the various silos of data in your organization in a single, manageable process. Razorleaf is an OpenBOM Certified Consulting partner providing services and products to extend, optimize, and automate OpenBOM. Our proven BOM methodologies and best practices can help you move from disconnected Excel/spreadsheet-based processes to an effective collaborative BOM solution.

The vision of OpenBOM is to support diversity and openness to help manufacturing companies to manage data and streamline processes. OpenBOM is your company, but we're building a unique and innovative technological platform for engineers, manufacturing companies, contractors, and supply chains. We see the success of our customers and it can be only achieved through the combination of technology and great partnerships.

1Click here to return to Contents

Lantek brings one of the most cutting-edge Euromac robots in the punching machine industry to life 09 June 2020

Lantek has announced a collaboration agreement with the Italian company, Euromac, recognized worldwide as a supplier of machines for working with sheet metal, including CNC Punches, Benders and automated sheet metal systems.

The agreement enables control of the "sorting cell" programmed with the Kuka KR 10, one of the most cutting-edge robots on the market. It uses two punching solutions from Lantek - Lantek Expert PUNCH-PLUS and Lantek Stackmaster, automating the unloading line for parts and their subsequent palletization and storage.

The Lantek software solutions are responsible for the whole process, which starts with programming the CNC Punch. During the punching process, the machine ejects/unloads the parts through a hatch. The parts then pass along a conveyer belt to an AI vision table where a camera detects the orientation of the fallen part. The Lantek software uses this information about the shape and orientation of the part to control the robot's suction cups positioning and activating them to pick up each part. The robot finishes by rotating and placing the part in its correct location on the storage pallet.

The full control of the punching and palletizing process makes it possible to automate the whole production cycle for large volumes of parts, allowing production to be completely unattended.

"The close collaboration between Euromac and Lantek is a significant step forward towards the full process automation of punching lines and the subsequent palletization of the parts, using state-of-the-art technology such as artificial vision systems and robots. This technology maximizes production speed and flexibility and improves workers' conditions and safety", states Francisco Pérez, director of the OEMs channel at Lantek.

The sales manager at Euromac, Ferrán Villanueva, highlights the importance of this collaboration, "For us, this is a great opportunity to use Lantek software for the Kuka KR 10. It will allow us to optimize the processes, reduce times and achieve efficient operation, guaranteeing the highest quality and tightest response times from this robot, one of the most cutting-edge on the market."

Click here to return to Contents

Mentor joins the O-RAN ALLIANCE to help drive interoperability requirements for 5G network silicon

09 June 2020

As the worldwide buildout of public 5G wireless networks continues, and interest grows in private 5G wireless networks, the pace of deployment and full operation of these networks is increasingly dependent on successful interoperability across multiple vendors. Unlike the pre-5G era, 5G wireless networks must incorporate a broad range of specifications, each of which require their own set of tests.

To address these challenges, help accelerate worldwide 5G deployment and support designers of hardware solutions targeting 5G applications, Mentor has joined the O-RAN ALLIANCE -- a group of leading telecom service providers and ecosystem suppliers committed to openness, intelligence, flexibility and performance in the evolution of 5G radio access network (RAN) architectures and orchestration. As an alliance member, Mentor will focus on verification and validation requirements for open standards-based, highly-configurable network development.

"While there are many challenges to building the products that comprise 5G networks, testing is the key to success," said Joe Sawicki, executive vice president for Mentor's IC Segment. "Mentor's comprehensive silicon verification flow is ideally suited to help O-RAN and its members meet their goal of dramatically streamlining interoperability validation cycles for 5G deployments around the globe."

O-RAN encourages collaboration among a large group of companies, enabling them to build the best, most cost-effective 5G products. At the heart of many of these products are systems-on-chip (SoCs), which must be verified within the context of the overall 5G systems they will power.

Among the technologies to be utilized in support of these efforts is Mentor's X-STEP post-silicon validation platform for mixed vendor, system level-testing of 5G components, including SoCs, baseband boards and antenna systems. Acquired via the company's 2018 purchase of Finnish 5G software firm Sarokal, X-STEP works together with Mentor's VeloceTM StratoTM hardware emulation platform to deliver a unique verification flow encompassing pre-silicon and post-silicon verification functionality for 5G networks.

Using this comprehensive flow, 5G network designers can conduct

Pre-silicon SoC protocol compliance verification,

Development-phase test case sharing between partner companies for early verification in the development phase, and

Lab-grade verification with bit-accurate analysis of data for timing specifications and antenna configuration testing.

1<u>Click here to return to Contents</u>

Nemetschek - Safe Workplaces for Returning Office Workers

11 June 2020

As people start returning to their offices after the massive work-from-home experiment, uncertainties are high. The Nemetschek Group is convinced that flexible planning and smart tools can make the new 1,5m world-of-working safe and pleasant.

In many countries, people are slowly returning to their office workplaces. Companies are experimenting with different percentages of staff going back to their office desks, trying to figure out the best and safest modalities. Will colleagues continue working as they did before? Will they still want to share

offices or has the special situation changed how we can work together? How much office space will be needed in the future? "Currently, no one can predict exactly what the impact of this unprecedented situation will be on the workplace", says Koen Matthijs, Chief Division Officer, Operate & Manage Division at the Nemetschek Group.

In the short term, workplaces will most certainly be taking on three core challenges when workers return to the office: implementing new standards for sanitation and workspace utilization, ensuring worker comfort and productivity during a stressful time, and managing social distancing. "Integrated Workplace Management Systems can ensure a safer and more efficient workspace during this time", explains Koen Matthijs. "Using enhanced technologies can also send a powerful signal to employees that their wellbeing is a priority, while at the same time creating opportunities for future improvement".

In the long term, the remarkable shift towards remote work also presents opportunities for the workplace. Even if companies are likely to transition all or most of their employees back to the office environment, greater flexibility for remote work is nevertheless likely to become a trend. To benefit from this trend, workplace managers need to thoroughly understand how their spaces are being used. Integrated Workplace Management Systems can gather that data and build the basis for decisions about whether or not to shift to an agile work environment, how much floor space or what kinds of physical improvements might be required to enhance employee wellbeing and how to streamline cleaning procedures in the light of changing standards. The disruptions of the current situation will change behaviors and standards, and both better data and better tools can enable workplace managers to adapt quickly and effectively to the new demands of a modern workplace.

"This is a learning process for all of us, not least for the technology", says Koen Matthijs. "Stored in Building Information Modeling Systems (BIM), this large amount of data (or intelligence) can be reused for future office projects. That means that architects and engineers can draw on those experiences and improve their building designs to better meet future needs and requirements". For offices, that are up to future challenges.

Click here to return to Contents

PTC Extends Alliances with Rockwell Automation and Microsoft to Accelerate Value of Digital Transformation for Manufacturers

08 June 2020

PTC and Rockwell Automation, Inc. announced Factory Insights as a Service, a turnkey cloud solution that enables manufacturers to achieve unprecedented impact, speed, and scale with their digital transformation initiatives. The new offering, unveiled during PTC's Global Partner Summit event at the LiveWorx® 2020 digital transformation event, marks a significant advancement to the collaboration among Rockwell Automation, Microsoft, and PTC.

Factory Insights as a Service, powered by technology from PTC, Rockwell Automation, and Microsoft, is delivered in the cloud in a turnkey fashion and supports the industry's most common high-value digital transformation use cases:

Real-time Production Performance Monitoring

Asset Monitoring and Utilization

Connected Work Cells

Digital and Augmented Work Instructions.

Factory Insights as a Service includes many of the key product components of PTC and Rockwell

Automation's FactoryTalk® InnovationSuite, including PTC's industry-

leading ThingWorx®, Kepware®, and Vuforia® products, optimized for OT data coming from Rockwell Automation's best-in-class automation and information offerings. It leverages Microsoft's cloud, industrial IoT, and edge services, including Azure IoT Hub and Azure IoT Edge, enabling manufacturers to rapidly connect individual sites and implement projects across their enterprise network. This enables customers to save time and money by reducing the complexity that they typically undertake as part of an industrial internet of things (IIoT) implementation and greater digital transformation effort. Factory Insights as a Service is a perfect on-ramp for manufacturers interested in improving their operations by providing valuable intelligence and insights on operational performance, asset utilization, and workforce efficiency.

"Factory Insights as a Service offers our industrial customers a leaner, accelerated approach to digital transformation," said Jim Heppelmann, President and CEO, PTC. "The offering reduces reliance on IT and OT resources, and, most importantly, takes a value-first approach that allows manufacturers to focus on initiatives that create business impact at scale."

In today's digital-first environment, manufacturers require solutions that solve complex infrastructure issues, data accessibility challenges, and reduced resources. With Factory Insights as a Service, manufacturers can achieve a 90 percent reduction in development time and cost and as much as 90 percent faster time-to-value for the most critical high-value use cases underpinning industrial digital transformation.

"Simplifying and accelerating digital transformation initiatives for our clients is a fundamental driver for our alliances with PTC and Microsoft," said Blake Moret, Chairman and CEO, Rockwell Automation. "Factory Insights as a Service builds on the breakthrough capabilities of FactoryTalk InnovationSuite to quickly operationalize some of the most critical use cases improving production, asset, and workforce efficiency, while future-proofing our customers' digital transformation roadmap."

"We believe in the power of collaborations to help manufacturing companies accelerate the delivery of value to their customers and unlock new business opportunities. By teaming up with PTC and Rockwell Automation to converge IT and OT excellence, we empower businesses to rapidly deploy their relevant use cases at scale – from asset, workforce, and production-floor performance to accelerate impact across the global production network," said Jason Zander, Executive Vice President, Microsoft Azure at Microsoft.

1 Click here to return to Contents

SAP Joins Open COVID Pledge and Provides Access to Patents to Fight COVID-19

08 June 2020

SAP SE adopted the Open COVID Pledge, committing to make all its patents available, at no cost, to help combat the COVID-19 pandemic and mitigate its impact.

This pledge helps remove barriers to intellectual property and underscores our efforts to use technology to help businesses and communities during this time of need.

In addition to opening access to all patents, we've also made select solutions free to businesses to ensure continuity, and we created the Bringing Citizens Home initiative to help stranded citizens return home. We currently are working with Deutsche Telekom to create the Corona-Warn App, on behalf of the German Federal Government, to help trace infection chains of SARS-CoV-2 in Germany.

The terms of SAP's pledge to open access to its patents are defined in the Open COVID License -

Patent (OCL-P) v1.1 and can be found here. We hope that by opening access to our patents, innovation to aid in the fight against COVID-19 will thrive. The pandemic can be stopped only if we come together as a community and encourage the emergence of new technology and solutions to help communities and businesses recover.

1 Click here to return to Contents

Wipro Extends Partnership with VMware to Deliver BoundaryLess Enterprise Solution

10 June 2020

Wipro Limited announced the launch of its BoundaryLess Enterprise Solution (BLE), powered by VMware Tanzu product portfolio. As part of its commitment to integrate VMware's latest innovations into its BLE, Wipro is also a Design Partner for the VMware Tanzu portfolio which consists of Tanzu Mission Control, Tanzu Kubernetes Grid, Tanzu Service Mesh, vSphere 7 with Kubernetes etc.

Large enterprises want to leverage Kubernetes to increase developer velocity. Kubernetes provides them the constructs — containers, microservices and Application Program Interface (APIs) — to build modern applications, and operators with means to operate infrastructure with consistency across clouds. Wipro's BLE offering packages Kubernetes capabilities from Tanzu portfolio and complementary technologies to provide customers an enterprise-ready end-to-end integrated ecosystem solution to drive modern application development.

BLE provides an accelerated containerization journey through ready-made pipelines for automation of day1 and day2 operations. BLE also offers enhanced container security leveraging NSX-T. BLE empowers the customer's hybrid/multi-cloud application modernization journey leveraging Tanzu Service Mesh. This enables distributed applications running on-prem and Cloud, supporting use cases like bursting and Disaster Recovery.

Wipro will offer these services across Americas, Europe, Middle East, Africa and Asia Pacific. Wipro's customers will have access to run use cases and proof of concepts from the company's global Centers of Excellence.

""BoundaryLess Enterprise' is a new paradigm that will help enterprises power their digital transformation. This solution will enable enterprises to accelerate the development and deployment of modern apps and will simplify management of a hybrid/multi-cloud multi-cluster Kubernetes-based infrastructure. BLE will help customers reduce time to market and drive agility and scale, which makes it an exciting new offering," said Milind Halapeth, Vice President, Cloud and Infrastructure Services, Wipro Limited.

"VMware has a strong relationship with Wipro, which spans over multiple VMware technologies. Our customers are adopting Kubernetes, and offerings like Wipro's BLE can simplify and accelerate use of Kubernetes to build modern applications," said Teri Bruns, Vice President, Tanzu Partner Ecosystem, VMware.

1 Click here to return to Contents

Wipro and IBM collaborate to help clients accelerate their cloud journeys

08 June 2020

Wipro Limited announced a collaboration with IBM to assist Wipro customers embark on a seamless and secure hybrid cloud journey. Through this alliance Wipro will develop hybrid cloud offerings to help businesses migrate, manage and transform mission-critical workloads and applications, with security across public or private cloud and on-premises IT environments.

Wipro IBM Novus Lounge, located at Wipro's Kodathi campus in Bengaluru is a dedicated innovation center. It will offer a comprehensive suite of solutions leveraging Cloud, Artificial Intelligence, Machine Learning and Internet of Things capabilities to foster innovation for enterprises, developers and startups. Customers will have remote access to IBM and Red Hat solutions, designed to help them scale their technology investments for improved experience and business agility with connected insights. Additionally, Wipro will leverage IBM Cloud offerings and technologies alongside in-house services to develop industry solutions for clients in Banking and Financial Services, Energy and Utilities, Retail, Manufacturing and Healthcare space.

Ramesh Nagarajan, Senior Vice President – Cloud Services, Wipro Limited said, "Wipro empowers customers across industries to re-imagine their cloud journey with its business-first strategy and industrialized solutions approach. Wipro IBM Novus Lounge will allow us to showcase hybrid multicloud and open source solutions even more comprehensively and support our customers' continuous business transformation journey."

Gaurav Sharma, Vice President – Cloud and Cognitive Software, IBM India said, "As companies across the world continue to drive digital transformation, decision-makers must rethink radically on how to leverage the combined power of data, cloud and open source technologies to become industry leaders. Wipro IBM Novus Lounge brings together Wipro's expertise across industries and IBM's open source technologies, designed to be secure and scalable across hybrid cloud, Data and AI, all running on Red Hat OpenShift promoting the journey to Cloud and journey to AI."

1 Click here to return to Contents

Events

Bentley Systems Year in Infrastructure 2020 Conference is Going Digital

12 June 2020

Bentley Systems, Incorporated announced that its annual infrastructure event, the Year in Infrastructure 2020 Conference, is "going digital." This new digital format will bring together, now for a broader global community, the thought leadership, networking, and learning content that Bentley conference attendees have come to expect.

The virtual Year in Infrastructure 2020 Conference provides complementary access to a wide range of content relevant to infrastructure professionals in every role and at every phase of the infrastructure lifecycle. Highlights include:

Live Judging: Year in Infrastructure 2020 Awards Finalists' Presentations – October 5 - 16 The Year in Infrastructure Awards finalists, chosen by independent juries of industry experts, present their projects to the judges beginning October 5. This is your chance to hear from the people behind the most extraordinary infrastructure projects of the year as they tell the story of how they leveraged digital advancements to achieve unprecedented outcomes.

Year in Infrastructure 2020 Executive Perspectives – October 20 - 21

Greg Bentley, CEO of Bentley Systems, will be joined by leading infrastructure executives for an interactive discussion on the resilience challenges they face and how to meet those challenges through digital advancement.

Keith Bentley, founder and chief technology officer, will discuss Bentley's open strategy for digital twins. Keith will be joined by other leading industry visionaries who have deployed digital twins successfully for project delivery or asset performance.

TwinTalks Premiere – October 20

Infrastructure digital twins will be front and center at this year's event. Join leading industry figures as they moderate six sector-specific TwinTalks, exploring the implications of digital twins for Digital Cities, Design and Construction, Digital Plants, Energy Utilities, Rail and Transit, and Roads and Bridges. Listen to interactive panel discussions with leading industry and business leaders and discover the fascinating opportunities that digital twins introduce for each of these critical infrastructure sectors. The initial October 20 TwinTalks are each part of a three-part series, with the second and third installments of the TwinTalks' series scheduled through mid-November.

Year in Infrastructure 2020 Awards Ceremony - October 21

After months of jury deliberations, the winners of the Year in Infrastructure 2020 Awards will be announced in our live global broadcast. Don't miss what has been called the "Academy Awards of Infrastructure."

ACCELERATE Sessions - October 27 and beyond

Join Bentley product executives Dustin Parkman (Project Delivery), Robert Mankowski (Digital Cities), Ken Adamson (Design Integration), and Alan Kiraly (Asset and Network Performance) as they and their leadership teams review the latest advancements in Bentley applications and cloud services. These sessions will kick-off a multi-track program of more than 100 ACCELERATE sessions that will continue into November. ACCELERATE will feature Bentley and user experts in panel discussions and interactive demonstrations on the latest product advances, innovations, and best practice digital workflows.

Learn More about the Year in Infrastructure 2020 Conference

Join us online for the virtual Year in Infrastructure 2020 Conference and learn from peers, industry experts, and innovators who will share their infrastructure digital twins' successes. Register for updates at https://yii.bentley.com/en.

Click here to return to Contents

Mastercam Plans Demonstrations of Latest CAD/CAM Software at IMTS 2020

09 June 2020

The International Manufacturing Technology Show will be held September 14-19 in Chicago, Illinois. Attendees at the 2020 IMTS Show will have access to the latest in the line of powerful Mastercam machining software. Stop by booth # 133340 at McCormick Place for a look at the latest Mastercam release, Mastercam 2021, with features and enhancements that streamline your entire process, from job setup to job completion.

Mastercam 2021 increases machining productivity and reduces overall production costs with faster and more flexible multiaxis improvements, improvements in turning and turning-related applications, advances in speed, safety, and much more.

According to Mastercam President and CEO Meghan West, these advancements have been made in direct response to the needs of the global manufacturing community. "Mastercam is developed by listening to our users and creating solutions for their problems. We adapt to changing needs to ensure that the customer experience is the best it can be as we continue to innovate for improved automation, efficiency, connectivity, and precision. From job setup through job completion, you can depend on our

technology to empower productivity."

Faster, more flexible multiaxis programming. As more shops continue to rely on streamlined multiaxis cutting for single-setup precision, Mastercam 2021 adds new techniques and strategies. Expanded Multiaxis Pocketing combines efficient pocket cutting with a focus on finishing with Accelerated Finish tools, automatically maintaining the correct tool contact within defined parameters. Mastercam now gives you the ability to analyze and modify the UV direction on surface models, expanding the power and flexibility of multiaxis flowline milling toolpaths. The new 3+2 Automatic Roughing toolpath automatically makes multiplane 3-axis roughing toolpaths by evaluating the model and stock, creating a cut, calculating what remains, and repeating the process until roughing is complete.

Advances in turning and turning-related applications. Mastercam 2021 expands the support for modeling chucks and chuck jaws; you can now define them by selecting a solid model. Mastercam Mill-Turn supports collet chucks as individual component types which greatly expands the range of machines that can be directly supported. Mill-Turn Simulation has been added to the Mastercam Simulator interface so you can experience Mill-Turn simulation with the same interface tools as Mastercam Simulator. And, our Swiss machining solutions combine Mastercam Mill and Mastercam Lathe with specialized post processors. This adds machine-specific controls inside the Mastercam interface, delivering accurate G-code for a wide variety of Swiss machines.

NC Programming speed, safety, and precision. A new toolpath in Mastercam 2021, Advanced Drill, is a customizable multi-segment drill cycle that is useful for spot drilling, deep hole drilling, and back spot facing and each segment of the drill cycle can be defined and customized. And, when using tools with a tip angle, the new Chamfer Drill toolpath chamfers holes after calculating the correct depth based on the desired width or depth, and lets you select holes of different diameters or sizes, or that lie in different planes, and machine them in a single operation with a single tool. When creating a bounding box in Mastercam 2021, the new Wrap option allows you to create the smallest bounding box possible. The new Check Tool Reach function lets you check your tool and holder against the selected model geometry to view where the tool can and cannot reach.

1 Click here to return to Contents

Financial News

Atos publishes its 2019 Integrated Report and paves the way for a more responsible era 08 June 2020

Atos published its second Integrated Report presenting the Group's financial and extra-financial performance, strategy, governance and key achievements for the year 2019. The report addresses the risks and opportunities, challenges and initiatives of Corporate Social Responsibility (CSR). It has been prepared in accordance with the 2019 Universal Registration Document and in strict compliance with the recommendations of the Global Reporting Initiative (GRI), option "comprehensive", and the International Integrated Reporting Council (IIRC).

At a time when the world is experiencing an unprecedented crisis, Atos, in its 2019 Integrated Report, demonstrates how sustainability is rooted in all its activities, according to its "raison d'être" (statement of purpose). Atos is therefore ready to support its customers pursue their digital transformation journey, in the "new normal", in a fully sustainable, responsible way.

Whilst the safety of its employees has been Atos' top priority throughout this Covid-19 crisis, Atos is also fully committed to continue to invest in helping its employees acquire new skills

and competences to adapt to the digital world.

Elie Girard, Chief Executive Officer of Atos, said: "This 2019 Integrated Report highlights Atos' everincreasing environmental ambitions, because in a world in perpetual motion, economic performance cannot be decoupled from environmental and societal ambitions. The crisis we are going through can only amplify the trend towards decarbonization and a more responsible world. Atos is ideally positioned to create more value for all its stakeholders around this trend and my commitment is to accompany our clients on the road to carbon neutrality."

The digital versions of the Universal Registration Document and the integrated report are available on the Atos website.

1 Click here to return to Contents

Autodesk, Inc. Announces Move To Virtual Annual Meeting Of Stockholders

09 June 2020

Autodesk, Inc. announced that its 2020 Annual Meeting of Stockholders scheduled for Thursday, June 18, 2020, at 3:00PM., Pacific Time, will be conducted virtually due to COVID-19. Consistent with Autodesk's previous notification, the virtual meeting will take place only

at www.virtualshareholdermeeting.com/ADSK2020 and stockholders will have the opportunity to listen to the meeting, submit questions, and vote online.

As described in the proxy materials for the Annual Meeting, stockholders as of the close of business on April 22, 2020, the record date, are entitled to participate in the Annual Meeting.

Stockholders can participate in the Annual Meeting by

visiting www.virtualshareholdermeeting.com/ADSK2020 and entering the 16-digit control number found on the proxy card, voting instruction form, or notice of internet availability previously received by stockholders. Stockholders may vote and ask questions during the Annual Meeting by following the instructions available on the meeting website.

All stockholders are encouraged to vote and submit their proxies in advance of the meeting by one of the methods described in the proxy materials. The proxy card, voting instruction form and notice of internet availability that were previously distributed already reflect the possibility of a change in meeting format and may continue to be used to vote shares in connection with the Annual Meeting. Stockholders who have previously sent in proxies, or voted via telephone or by internet, do not need to take any further action. For more information, please call Autodesk Investor Relations at 415-507-6373.

1Click here to return to Contents

AVEVA Group PLC Announces its Results for the Year Ended 31 March 2020

09 June 2020

AVEVA Group plc results for the year ended 31 March 2020. Highlights

Revenue grew 8.8% to £833.8m (FY19: £766.6m)

Organic constant currency revenue4 grew 7.4%

Recurring revenue up 25.7% to £518.5m (FY19: £412.6m) representing 62.2% of total revenue (FY19: 53.8%)

Growth across all geographic regions with Asia Pacific showing particular strength

Each of the Business Units grew, with strong growth in Asset Performance Management (APM) and Planning & Operations

Successful introduction of AVEVA Flex subscription model supporting strong growth in subscription

Cloud growth accelerating with an increase of some 200% in total contract value

Adjusted EBIT up 23.3% to £216.8m (FY19: £175.9m) with margins up to 26.0% (FY19: 22.9%), inline with expected progress towards medium term target of 30%

Strong balance sheet with cash and deposits of $\pounds 114.6m$, no debt and strong cash collection post year end

Final dividend maintained at 29.0 pence per share reflecting confidence in AVEVA's resilience, strong balance sheet position and ongoing cash generation, balanced with prudence regarding the global economic crisis. The Company has not furloughed any employees or made any reductions to headcount related to Covid-19. We also do not expect to utilise any government-backed financing

Business outlook resilient with digitalisation key to driving customers' efficiency and high levels of recurring revenue for AVEVA

Chief Executive Officer, Craig Hayman said:

"I am very pleased with AVEVA's performance over the last year. The Group has grown as we play a leading role in the digitalisation of the industrial world, which is being driven by a need for sustainability, the industrial internet of things, Cloud, data visualisation and artificial intelligence. At the same time, we continued to drive operational improvement in the business, which is increasing recurring revenue and margins.

AVEVA's team has adapted impressively to the current market and operating environment. The safety of our employees is paramount and I was very pleased that we managed to deliver a successful close to our financial year with 95% of employees working remotely. We are focused on being digital in everything that we do, accelerating Cloud and driving the roll out of our subscription offering, AVEVA Flex.

Looking forward, AVEVA is well placed to navigate through the challenges of the current environment, with the benefit of recurring revenue from multi-year contracts. AVEVA is in a strong position and our strategy and medium-term objectives remain unchanged."

1 Click here to return to Contents

Implementation Investments

Aluminum Producer Novelis Extends Use of Dassault Production Planning and Scheduling Solution to Plants in US and Brazil

12 June 2020

Novelis, the leading producer of flat-rolled aluminum products and the world's largest recycler of aluminum, has extended its use of Dassault Systèmes' DELMIA Quintiq applications to improve production planning and scheduling at two aluminum plants in the U.S. and in Brazil. The company has worked with Dassault Systèmes since 2003.

In the U.S., Novelis will deploy DELMIA Quintiq applications to plan and schedule metal production in its new plant in Guthrie, Kentucky, which will begin producing aluminum for automotive applications in

2020. In Brazil, it will use DELMIA Quintiq applications to optimize scheduling at its Pinda plant, which is its largest facility in South America and produces aluminum sheet for beverage can, consumer, industrial and packaging markets.

As the energy and materials industry faces increasing demand and greater environmental sustainability requirements, a fully integrated digital approach can help metals manufacturers to mitigate these challenges by improving lead times, delivery performance and administrative efficiencies, as well as reducing inventory levels and maximizing the use of resources.

Dassault Systèmes' DELMIA Quintiq applications powered by the 3DEXPERIENCE platform are tailored to address the complexity in aluminum rolling processes. In a single digital environment, aluminum manufacturers can model, plan and optimize their business operations from end to end, and shift their focus from reducing costs to strengthening competitive advantage and creating opportunities for future production growth.

1Click here to return to Contents

FPS Apparel Empowered to Produce 10,000 Protective Masks Per Week

12 June 2020

With help from Gerber Technology, FPS Apparel was able to quickly transition from producing promotional apparel to producing personal protective equipment (PPE) in just a week. FPS Apparel's current production allows them to produce and donate 10,000 masks per week to various healthcare facilities and first responders. As COVID-19 began to spread to New York City in early March, FPS Apparel knew they had to do their part to protect the health and safety of those fighting the pandemic on the frontlines.

"It's a priority for all of us at Gerber to ensure our customers have everything they need to successfully transition to PPE," said Pete Doscas, Vice President & General Manager, Americas Sales & Service Delivery of Gerber Technology. "With FPS Apparel being in the middle of an epicenter, we knew we had to help them, not only in regards to cutting equipment but through training and by connecting them with our other customers, which allowed them to get up and running as fast as possible so they could do their part to help stop the spread of COVID-19."

In order for FPS Apparel to produce a large quantity of effective masks, they needed cutting equipment that would allow for fast, reliable and efficient quality cutting. Gerber was able to deliver and install a Gerber Paragon® multi-ply cutter and AccuMark® fashion design software in just a matter of days, allowing FPS Apparel to dramatically increase production. The cutter was able to seamlessly integrate with FPS' microfactory setting ensuring little disruption to their workflow. Gerber also provided FPS Apparel with production-ready patterns and expertise on PPE production.

"It was truly a team effort with Gerber," said Dan Feinberg of FPS Apparel. "They delivered and installed the machine in less than a week while providing the support and training we needed to start production right away. They've also connected with several of their customers to find capacity for sewing and procurement."

By converting their production, FPS has not only saved thousands of lives but they've also helped save jobs. Rather than temporarily shutting down their production completely when COVID-19 reached New York City, they chose to keep their employees working by giving them the opportunity to use their skills to help keep those on the frontlines safe and healthy.

1Click here to return to Contents

Free ALPHACAM Licence Helps Codem Produce Urgent PPE

10 June 2020

A free evaluation licence from ALPHACAM meant that a manufacturer could put a machine tool that hadn't been fully commissioned and was standing idle during the Coronavirus crisis, to work producing essential PPE for front line health workers.

Codem Composites had recently invested in a previously-owned Blackman & White CNC machine with a bed capacity of 2.2 square metres, for cutting carbon-fibre pre-impregnated with an epoxy resin, to make components for the motor sport industry and satellite dishes.

"It hadn't been fully commissioned, and we had post-processing issues with the software and interface. We didn't want to invest several thousand pounds in software immediately, given the uncertainty brought about by Coronavirus," explains Managing Director Kevin Doherty. "But when we got the call asking for help in cutting NHS scrubs, we approached ALPHACAM, which is part of the Hexagon group, to help us get the machine up and running.

"We have a good working relationship with Hexagon, as we've used one of their portable CMM arms for collecting surface geometry measurements of our products since 2018. "We'd already discussed switching our CAD/CAM to products from Hexagon Manufacturing Intelligence's production software portfolio when we need to review our existing licences, and are also in the early stages of looking at investing in an ERP system from them.

"ALPHACAM supported us by giving a free evaluation licence for us to cut the scrubs."

The software gave them complete flexibility and speed of production, by optimising nests. "A full scrub comprises several components, and comes in a variety of sizes, ranging from small to double XL. The tunic is made from a front, back, sleeves, collar, V at the front, and a couple of pockets. Trousers are a left and right leg both front and back, two standard pockets on the side and a patch pocket on the back. To utilise the material properly and avoid waste, we may nest a number of left legs, for example, together with tunic fronts or collars and sleeves."

Running at a capacity of around 500 full scrubs a week, the Blackman & White machine cuts components for a group of volunteers in Northamptonshire to put together. "Previously, they'd been cutting them by hand, so with us taking on the cutting they can now spend more time sewing."

Kevin Doherty says ALPHACAM accurately interrogated the DXF file for each of the patterns, and computed all permutations and variables. "So rather than someone having to work everything out manually, such as what we were going to cut, how we were going to cut it, and what's got to go where, we simply inputted which components we needed in which sizes, and ALPHACAM did the rest, including helping us with the correct cutting speeds and feed rates. The first cut parts came off the machine within 24 hours of installing the software."

It comes as no surprise to the Managing Director of Blackman & White that Kevin Doherty found ALPHACAM to be the perfect software for their machine. "It's a highly cost effective and productive tool," says Alex White. "We match it up with our machines regularly when we're assembling them, and offer it as part of an overall package for our customers."

Blackman & White have been established for more than 50 years, and promote themselves as being the only UK manufacturer of multi-purpose industrial cutting equipment that can be used for routing, knife-cutting and laser cutting across a wide range of substrates.

Alex White says many of their customers found the COVID-19 crisis meant there was no longer an immediate requirement for the products they were cutting, and turned their hand to manufacturing PPE

for the NHS. "We've been supporting our customers with opportunities for the right tooling and programs for their machines to be able to cut visors, gowns and scrubs."

That even extends to publishing a variety of ALPHACAM files on their website for customers cutting NHS scrubs, which came about after Alex White gave up his weekends to personally cut around 300 sets of PPE.

Although the company doesn't undertake contract cutting, they have their Genesis-V model on show in the demonstration area of their factory at Maldon in Essex. The machine supports laser and knife cutting, and also carries a router for rigid and thin metals, along with wood.

While it would normally be used for cutting a variety of materials such as carbon fibre pre-preg composite, it was perfect for adapting to the needs of specialist PPE scrubs. "As I carried this work out personally, I learned to generate ALPHACAM files which cut these components perfectly. We made these DXF files free on our website for anyone with spare capacity on their cutting machines to manufacture this much-needed PPE. Several customers are using them."

He sums up why Blackman & White offer ALPHACAM as part of a package with their machine tools wherever appropriate. "It's absolutely perfect for many of our customers. ALPHACAM has powerful CAD tools for digitising parts or templates to generate the outer profile from a scanned image. This is then turned into a smooth contour with the correct profile to meet the needs of the application, before collecting the individual components together that comprise the complete assembly, and laying everything out on the material in the most efficient way. ALPHACAM's powerful set of nesting tools generate an efficient nest which makes the cutting of material both cost-effective and fast."

1 Click here to return to Contents

VT Garment Cuts Time to Market by 20% with Centric Manufacturing PLM

08 June 2020

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

Founded in 1981, VT Garment Co. Ltd is an innovative designer and world-class manufacturer of outerwear and sportswear for top global brands including Patagonia, Jack Wolfskin, Montbell, O'Neill and many others from the United States and Europe. VT Garment is a leader in Thailand's textile manufacturing industry and employs over 3,000 people across its two manufacturing facilities in Thailand and Myanmar.

Now, with the introduction of Centric Manufacturing PLM, VT Garment has shortened development lead times, improved accuracy in costing and gained visibility into sampling materials, streamlined communication across departments and reduced time spent on data entry and administration.

"With Centric PLMTM, we've reduced lead time by 7% by saving time that used to be spent organizing data. Overall, we have increased productivity by 30% because we freed up resources for action and gained visibility into timelines and activities across the whole organization," says Mingkwan Lotharukpong, Product Development Division Manager at VT Garment.

1Click here to return to Contents

Product News

Ansys and Electro Magnetic Applications Partner to Deliver Design-to-Validation Workflow for

Cable Harnesses

11 June 2020

Electro Magnetic Applications, Inc. (EMA) and Ansys are partnering to deliver an enhanced

design-to-validation workflow for certifying cable harness models in aircraft and automobiles. The workflow greatly reduces electromagnetic interference (EMI) risks to cable harnesses, slashes development time, speeds certification and expedites new products to market faster than ever.

Cable harnesses that transmit electrical power and signals to electronics within aircraft and automobiles must be protected from external EMI sources such as high-intensity radiated fields (HIRF) and lightning strikes. To safeguard these vehicles against EMI interference, time-intensive and costly electromagnetic compatibility (EMC) certification testing must be conducted on physical prototypes.

EMA and Ansys' new workflow, Ansys EMA3D Cable, is a robust, platform-level EMC cable modeling solution for overcoming EMC design issues. When used early in the design stage, EMA3D Cable can increase the fidelity of an engineer's product performance predictions, reduce development costs and the need for physical prototyping and leverage test results as a basis for final acceptance and certification.

"EMA3D Cable enables engineers to efficiently assess complex cable harness system designs and evaluate protection schemes for vehicles of all sizes," said Dr. Timothy McDonald, president of EMA. "Partnering with Ansys on this dynamic new workflow will allow our mutual users to significantly enhance cable harness compatibility designs and substantially decrease cost and risk on the path to EMC certification."

"OEMs are designing new vehicles to be sleeker and lighter. This typically requires the removal of cable harness shielding, which creates EMI vulnerabilities," said Shane Emswiler, Ansys' senior vice president, physics business units. "Designing cable harnesses with EMA3D Cable will help engineers mitigate safety-critical EMI issues — including HIRF, lightning strikes, crosstalk and electromagnetic pulses—improving certification support and reducing design expenses."

1 Click here to return to Contents

APRIORI Launches New Cost Insight Generate Solution

12 June 2020

aPriori announces the general availability of Cost Insight Generate, featuring an entirely new user interaction paradigm that proactively notifies a designer, cost engineer or buyer of components with Design for Manufacturability (DFM) risk and a preliminary component cost.

Cost Insight Generate, the latest in aPriori's expanding portfolio of cloud-based solutions, is connected to your company's Product Lifecycle Management (PLM) system. When a new or modified part is submitted to the PLM system, Cost Insight Generate automatically initiates a detailed manufacturability analysis. The system will also calculate a detailed manufacturing cost including the cost of any required tooling.

aPriori's Chief Product Officer, Julie Driscoll, commented "Our customers and potential clients are all telling us the same thing right now."

They are under increasing pressure to reduce time to market and lower product costs.

There is a serious lack of engineering bandwidth.

There is insufficient capacity in cost engineering to optimize all new product designs.

Everyone is struggling with demand, workflow and supply chain disruption due to COVID-19.

These challenges have many significant implications for global manufacturers, including:

An increased volume of manufacturing and cost related engineering change orders are causing more late stage design churn which often leads to missed product launch dates.

It is becoming harder and harder to meet target costs and profit margins.

Product portfolios are under serious scrutiny for viability under current market conditions.

Solution Highlights

Cost Insight Generate was designed specifically to address these challenges and will change the way companies implement simulation software in the future. Some of the key features provided with Cost Insight Generate include:

Automatic analysis of your digital twin CAD models for manufacturability and cost when they are checked into your PLM system or some other defined trigger.

Identification of parts that have the most cost and manufacturability issues.

The system will highlight the most important cost drivers on these parts and provide guidance for remediation.

Automated report generation delivered conveniently to the inbox of the designer, their manager, a supply chain manager in purchasing, or anyone else in the organization that would benefit.

Cloud-based deployment simplifies rollout and accelerates time to value.

PLM support for the first release will be offered for PTC Windchill® and Siemens Teamcenter® platforms. Additional out-of-the-box integrations are being considered for the future.

To initiate detailed investigations into manufacturability issues identified by Cost Insight Generate, aPriori is also introducing several important updates to our Cost Insight Design cloud solution for Designers and Engineers. An entirely new function that assesses a DFM Risk Score is now available. This allows designers to quickly prioritize their efforts against those components and design features that have the greatest impact on manufacturability and product cost. And finally, a new series of CAD plugins are available with Cost Insight Design for PTC Creo® and Dassault CATIA®.

1 Click here to return to Contents

Companies Embrace Onshape, the Only Pure SaaS Product Development Platform

10 June 2020

PTC announced major contributions its Onshape® business has made to lead the transition of the computer-aided design (CAD) and product lifecycle management (PLM) markets to a cloud-based Software as a Service (SaaS) model. Since being acquired by PTC seven months ago, Onshape has added hundreds of new customers, illustrating how quickly the product development industry is reaching a tipping point in its adoption of SaaS.

The Onshape platform is the first SaaS product development platform that unites robust CAD with powerful data management and collaboration tools. The SaaS model enables faster work, better collaboration, and more rapid innovation – with lower up-front costs and no IT infrastructure. Since its acquisition, Onshape's sales pipeline has tripled and PTC has significantly expanded Onshape resourcing to accelerate delivery of the latest innovations and reach an even broader market, from educational institutions to startups and large enterprises.

"Onshape's continued growth demonstrates the market's readiness to shift to the Cloud and capitalize on

the benefits of the SaaS model," said Jim Heppelmann, president and CEO, PTC. "The COVID-19 pandemic has fundamentally changed how we work, making it critical for technology tools to be available to workers wherever they are, whenever they are needed – and Onshape does just that."

Onshape has also been agile in its response to the global impact of the pandemic on educational institutions. PTC is offering Onshape to high school and college students for free to encourage STEM learning amidst school closures and to inspire the next generation of product and design engineers. Through this initiative, Onshape has already reached more than 100,000 students and educators since the original announcement.

With the cancellation of the FIRST season, PTC invited FIRST teams around the world to compete virtually in its design competition, Robots to the Rescue, in which teams were challenged to design a robot to solve a current real-world problem. More than 450 FIRST teams worldwide participated, with 19 winners announced during a livestream ceremony on May 29. The unique collaboration features and cloud-based capabilities of Onshape make it easy for students to participate in virtual competitions like this while gaining valuable experience.

"As a business leader and an engineer, it's inspiring to see the direct impact Onshape is having on not only the CAD and PLM markets, but also the students who will one day in-novate and redefine the industry beyond what we can even imagine," continued Heppelmann.

In addition, Onshape is being adopted by a wide range of organizations to rapidly pivot their development of new products, including respirators and ventilators. MasksOn.org, a nonprofit combining the expertise of Boston's medical, academic, and tech communities, used Onshape to repurpose full-face snorkel masks into durable, reusable, and sanitizable protective gear for high-risk clinicians caring for COVID-19 patients. Hardware startup Meter designed, built, and clinically tested the Rise Emergency Ventilator this spring in only 21 days, relying on the real-time collaboration tools in Onshape for engineers to work together remotely from their homes.

With continuous enhancements planned – many of which are underway – PTC intends to make the powerful Onshape platform integral to its SaaS strategy.

1 Click here to return to Contents

DATADVANCE Releases an AI-powered Cloud Solution pSeven

09 June 2020

DATADVANCE, an independent engineering software developer specialized in engineering process automation, design space exploration and predictive modeling, announces the release of pSeven Enterprise – an AI-powered true cloud solution to collaboratively design the best products faster.

pSeven Enterprise comprises, extends and democratizes the design space exploration and predictive modelling functionalities of pSeven platform by DATADVANCE.

As a true cloud solution, it improves collaboration within and between the teams, fastens resourceconsuming studies with scaled computations, and grants possibilities to extend existing functionality with a set of APIs. pSeven Enterprise incorporates the AppsHub – a corporate library of workflowpowered web applications with a simple user interface – advanced design space exploration and predictive analytics methods are now available for any engineer within the company.

"In ten years of a close collaboration with pSeven users from different industries, we have found out their pains and needs. We discovered that the sophisticated predictive analytics and design exploration techniques have to be democratized and made available to the domain engineers in a simplified form, with no need to deep-dive into the tool. Another challenge is an error-prone process of exchanging files, models and data within the teams and partners, with difficulties in version control, data loss etc. Moreover, the users of desktop Process Integration and Design Optimization platforms are constrained by lack of easy access to computational resources for resource-intensive computations and with the need to stay logged in throughout the entire process, as shutting down the machine would cause its interruption. Customers want to write their own plug-ins, integrate pSeven into their corporate IT ecosystem. pSeven Enterprise responds to all these challenges with its collaboration, scaling, apps publishing and extension capabilities via open APIs. Simply stated, pSeven Enterprise is pSeven + "Google Docs" + App Store, where "Google Docs" means the convenience and ease of collaborative work on the files and projects, and by "AppStore" we imply the creation and usage of engineering workflow-powered applications in the AppsHub, " – explained Laurent Chec, Vice-President of Global Sales at DATADVANCE.

Below is a non-exhaustive list of capabilities enabled by pSeven Enterprise:

Scale

pSeven Enterprise runs in a predefined and well-controlled IT environment on premises or on private cloud, and can be accessed from any browser or device. As a server-side web application, it allows running many resource-consuming studies simultaneously with a built-in resource manager, and running workflows offline without interruption - when user is logged out, workflow is still running on server. You can monitor, manage running process and analyse results anytime from anywhere.

Collaborate

pSeven Enterprise is a multiuser system with simultaneous multi-access, building and version control of the workflow. Shared workspaces are designed for a department or a team to share and edit workflows, results and files depending on the user roles, just as like using Google Drive.

Publish

With AppsHub available in pSeven Enterprise, Method & Tool experts can publish and share run-ready workflows, workflow-powered web services and web apps for the domain engineers, external suppliers and partners. AppsHub is a corporate collection of workflow-powered web applications with access and version control. AppsHub applications automates engineering tasks and democratizes design exploration and predictive modelling technology of pSeven. pSeven Enterprise users benefit from the reuse of engineering data, as all results of a workflow runs are stored and seamlessly updated in a common archive on a centralized server.

Extend

pSeven Enterprise features three API levels to ensure interoperability with external ecosystems and extended functionality with integration of third- party technology or embedding user algorithms.

If you are interested in trying pSeven Enterprise, an assisted 60-day free trial period is provided.

https://www.datadvance.net/product/pseven-enterprise/

https://www.datadvance.net/blog/news/2020/datadvance-releases-pseven-enterprise.html

<u>Click here to return to Contents</u>

DESL- Improving Critical Paths with Remote PLM Implementation

12 June 2020

DeSL offers remote implementation for all brands globally due to COVID-19. Ultimately saving time, travel fees, and abiding by safety precautions.

As employers continue to respond and navigate global lockdowns due to COVID-19, offices are closed and staff are acclimating to working from home. Planned technology projects don't need to face postponement during these times. Remote implementation can allow organizations to efficiently move forward, even with team leaders working from their homes.

The DeSL team has successfully completed implementation projects remotely without a significant difference from the traditional onsite process. DeSL can securely connect while communicating with critical project leaders because it is cloud-based and remotely accessible. Scheduling important team meetings are often easier to arrange since they no longer must take place in person, and video conferencing provides many of the benefits that traditional face-to-face interactions offer. A remote implementation is also a perfect choice for companies with high security or strict on-site policies.

The move to virtual meetings and remote software connections will generate savings for the project by eliminating normal travel expenses.

DeSL draws on its industry experienced team and expansive global projects to provide a streamlined and efficient implementation process. DeSL's goal is to get companies seeing results quickly, while being fully supported.

1 Click here to return to Contents

Hexagon -Advances in simulation enable optimal use of composites

10 June 2020

e-Xstream engineering, part of Hexagon's Manufacturing Intelligence division, has today launched the latest version of its Digimat multi-scale material modelling software, extending its advanced composite design capabilities across all scales as part of the Hexagon 10X Integrated Computational Materials Engineering (ICME) solution.

Reducing the cost of developing new composites is a priority for materials suppliers and the manufacturers specifying composites, but material development remains highly complex because every aspect of a material system from the chemical composition of the resin to the manufacturing process affects final performance. To manage this complexity, Digimat's integration with molecular dynamics software has been enhanced to extend its micro-level capabilities to predict a material's properties based on its chemical structure. On the meso-level, the direct engineering workflow for unidirectional composites has also been enhanced, enabling ply properties prediction based on their physical and virtual constituents.

"To use composites effectively and meet business needs every aspect matters – from the part's actual shape to the stacking sequence, from the selected constituents to the manufacturing process history. Engineers need to account for these inextricable realities in their composite design process, and these simulation advances will help designers to exploit the full potential of advanced materials by accounting for all these complexities and making the information actionable through an ICME approach."

The effect of defects, such as porosity or gaps from Automatic Fiber Placement can now be characterised at the full-scale coupon level using the state-of-the-art progressive failure analysis (PFA) models developed in collaboration with Pr. Camanho. As a result, the margins-of-safety engineers use to optimise material use and lightweight parts may be optimized with greater confidence.

Furthermore, Digimat 2020 makes this advanced PFA modelling available within Marc, MSC Nastran

as well as other structural analysis software via user subroutine, so that engineers can make detailed and accurate damage predictions of structures under load, reducing over engineering.

Design for manufacturing is also improved. New capabilities help manufacturers avoid costly tooling rework by embedding a digital twin of the composite manufacturing process from Digimat within thermo-mechanical finite element analyses tools such as Marc, Abaqus or LS Dyna. This open integration enables the designer to account for distortions introduced by processing and modify their mould design to achieve the required geometry.

For more information please visit www.e-xstream.com/whats-new-digimat-2020.0

1<u>Click here to return to Contents</u>

PTC Launches Windchill 12 Version of its PLM Software

10 June 2020

PTC announced the launch of the latest version of its award-winning Windchill® product lifecycle management (PLM) software. Windchill 12 offers new collaboration tools, capabilities to improve product quality, and enhanced deployment options that provide the tools necessary to adapt to today's changing work environment.

"Companies are recognizing a greater need for collaboration in their product development processes that allows for speed, confidence, and ease of administration – all while maintaining quality across development stages, stakeholders, and products," said Jeffrey Hojlo, Program Director, Manufacturing Insights & Product Innovation Strategies, IDC. "This takes on added importance as companies work through the challenges presented by the COVID-19 pandemic, such as a more distributed workforce, disrupted supply chains, and dynamic customer needs. PTC continues to position itself to address these market needs, and enable flexibility and resiliency for its customers."

Enhancements in Windchill 12 include:

Easy, Secure Access to Product Data

Building on Windchill's web-based user interface and highly configurable out-of-the-box applications, Windchill 12 enables companies to improve collaboration across the enterprise with even broader access to product data. Extensions to Windchill 12, including Silicon Expert and IHS integration, provide sophisticated component sourcing, part selection, and risk assessment, enabling customers to improve profit margins.

Quality Built into Every Project and Process

Closing the loop between engineering, manufacturing, supply chain, and field service, Windchill 12 gives companies greater end-to-end capabilities to uncover design issues early and react faster to adverse events. These capabilities enable companies to drive down the cost of poor quality and enable greater speed to market and customer satisfaction. The new proof of traceability feature, delivered through tight OSLC integration with Windchill 12, Windchill RV&S, Windchill Modeler, and third-party requirements management tools such as IBM Doors NG, allows companies to protect intellectual property at the origin of the digital thread. Leveraging the latest version of PTC's Creo® design software, Windchill 12 and the Creo ViewTM visualization solution allow users to identify changes in the view states captured in the CAD design to visually manage critical-to-quality (CTQ) characteristics.

Concurrent Manufacturing

Meeting the growing demand for customer-driven product configurations has become increasingly difficult given supply chain interruptions, evolving safety regulations, and time-to-market pressures. Windchill 12 helps customers adopt more flexible ways of producing products by providing digital thread continuity between the design and the information on the factory shop floor. Windchill 12 introduces powerful BOM transformation tools that enable manufacturing engineers to quickly view and reconcile upstream changes to downstream manufacturing and plant-specific BOMs.

Digital First

With Windchill 12, PTC continues its commitment to openness and standards-based integration with new enhancements based on the ODATA standard to enable multi-system orchestration and compatibility with PTC and non-PTC applications. Windchill 12 provides administrators additional tools to plan and execute upgrades from previous releases, enabling companies to streamline upgrades and get value quickly on the latest Windchill platform.

"With the release of Windchill 12, we at PTC have continued our commitment to an enterprise-wide PLM platform that addresses the changing ways our customers work, with a focus on extended team collaboration and alternative types of work," said Kevin O'Brien, general manager, PLM, PTC. "We are proud that the latest version provides not only a seamless experience with other products within the PTC suite, but also enables our customers to become more agile with faster access to up-to-date product information required at any given time."

1 Click here to return to Contents

PTC to Advance Industrial IoT Across the Enterprise with ThingWorx 9.0

09 June 2020

PTC announced the upcoming release of the latest version of its market-leading ThingWorx® Industrial IoT platform. Designed to accelerate Industrial IoT deployments across the enterprise value chain, ThingWorx 9.0 will deliver new and expanded features to help industrial companies create, implement, customize, and scale their solutions.

ThingWorx was the first platform that focused exclusively on the industrial market for digital transformation use cases. Since its initial launch, thousands of industrial companies, including discrete product and process manufacturers, have used ThingWorx to successfully optimize business processes, improve manufacturing operations, modernize field service delivery, and more. ThingWorx is an essential platform for delivering Industrial IoT solutions at scale, across the enterprise, and enables organizations around the world to gain competitive advantage and reduce costs.

ThingWorx 9.0 will deliver advances in several core development areas and introduce many new features and capabilities:

Enhanced Scalability and Availability

With Industrial IoT central to companies' digital transformation efforts, ThingWorx 9.0 will introduce a

new, optimized clustered configuration that will significantly improve the horizontal scalability and availability of the platform. This improvement will fortify the ability of ThingWorx to scale to vast populations of devices, manage demanding data processing requirements, and support a greater number of application users. Additionally, the clustered configuration will further strengthen ThingWorx deployments for critical operations, systems, services, and assets that need to remain highly available under the most important circumstances.

Accelerated Application and Solution Enablement

Expanding on the platform's heritage as a standout tool for rapid application enablement, ThingWorx 9.0 will formally introduce solution building blocks. These building blocks are pre-defined, pre-built configurations of connectors, domain models, business logic, and UI elements, which will simplify implementations of the highest-value Industrial IoT use cases, such as status monitoring, digital work instructions, and manufacturing job order management.

Unleashing Data Models with Microsoft Using OPC Unified Architecture (OPC UA)

PTC and Microsoft share the vision to drive openness and interoperability in industrial IoT and support the industrial interoperability standard OPC UA. ThingWorx 9.0 will bring seamless integration with OPC UA components that Microsoft contributed to the OPC Foundation, including OPC UA Publisher, OPC UA Twin, and OPC UA Global Discovery Server, offering the ability to deliver intelligence and data richness from the edge to the cloud. OPC UA helps integrate the ThingWorx Kepware® connectivity solution and Microsoft Azure with ThingWorx, where data models get automatically standardized for simplified solution enablement.

Analytics Advancements

ThingWorx 9.0 will introduce enhanced predictive analytics scoring at the edge to reduce data transmission costs and latency challenges, and improve the accuracy of asset performance predictions. These advantages are important for deployments of ThingWorx at the enterprise level, as these companies rely on the insights from the ThingWorx Analytics[™] solution to improve decision making, optimize operational processes, and reduce unplanned downtime.

Scaling ThingWorx with Solution Central

ThingWorx 9.0 will simplify the scaling of Industrial IoT deployments across the enterprise with enhancements to the Solution CentralTM tool. Administrators will have access to a broader range of self-service functions for deploying ThingWorx solutions, managing ThingWorx environments, and enabling development team collaboration. Since its introduction in ThingWorx 8.5, Solution Central has been adopted by hundreds of ThingWorx customers and partners that are scaling ThingWorx deployments across their organizations.

"The introduction of ThingWorx 9.0 will mark an important advancement for PTC's Industrial IoT strategy," said Joe Biron, General Manager of Industrial IoT at PTC. "Our added investments in scalability, solution development, OPC UA support, and stronger analytics are critical as our customers continue to scale their Industrial IoT deployments across the enterprise. These enhancements come at an especially important time, as companies look for new ways to innovate and address challenges from the impact of COVID-19, such as the increased need for remote monitoring, control, and services."

In addition to strong customer adoption and success, ThingWorx continues to see consistent acknowledgment as a leading Industrial IoT platform from industry analyst firms. Analysts continue to credit the advancements of ThingWorx as a platform, as well as PTC's strategic alliances with Rockwell Automation and Microsoft.

ThingWorx 9.0 will be available this summer. To register for the upcoming "What's New in ThingWorx 9.0" webcast, please click here.

Additional Resources

ThingWorx Industrial IoT Platform

Industrial IoT for Digital Transformation

1Click here to return to Contents

Rockwell Automation and PTC Enhance FactoryTalk InnovationSuite to Simplify Digital **Transformation**

10 June 2020

Rockwell Automation, Inc. and PTC announced strategic enhancements to industry leading FactoryTalk InnovationSuite, powered by PTC, to serve the needs of a very fast growing, dynamic industrial digital transformation market. Launched in 2018, the FactoryTalk InnovationSuite, powered by PTC offering has already seen rapid customer adoption, helping achieve significant improvements in operational efficiency, reduction in unplanned downtime and improved quality.

The latest enhancements center around improved OT/IT integration, enabling customers to contextualize real-time operational data from critical sources such as plant floor devices, control platforms, and time series-based Historians and Manufacturing Execution Systems (MES). By automatically integrating the contextualized data and underlying data models into Industrial IoT/Analytics platforms like the PTC ThingWorx® platform, clients are able to simplify, automate, and accelerate OT/IT convergence.

These integration capabilities reduce the data cleansing, aggregation and contextualization work by up to 80%, which accelerates digital transformation deployment. This approach also maintains, enriches and propagates OT data models into IT systems. These data models and the underlying information can then be leveraged in developing richer analytic insights and predictive outcomes at the enterprise level.

"At the core of achieving strong financial results through digital transformation is the ability to turn data into actionable insights. These new capabilities will allow customers to achieve faster time to value and increased ROI's," said Arvind Rao, Director, Product Management for Information Systems at Rockwell Automation. "We're very pleased to achieve yet another milestone in this joint innovation journey with PTC and be recognized as leaders in modular and integrated capabilities spanning Industrial IoT, analytics, MES, and augmented reality."

"We're delighted with the deeper integration capabilities of the FactoryTalk InnovationSuite, powered by PTC, but more importantly how we're applying the technology to high value digital use cases that unlock double digit impact for our customers," said Howard Heppelmann, Divisional Vice President and General Manager, Connected Operations at PTC. "We look forward to continuing our strategic relationship with Rockwell Automation to help customers accelerate and simplify their connected enterprise journey."

Click here to return to Contents

Synopsys Delivers Complete Workflow for Automotive Lighting Design and Visualization in CATIA 10 June 2020

Synopsys, Inc. announced the latest release of its LucidShape® CAA V5 Based software product to provide the industry's only complete design and visualization workflow solution for automotive lighting design within the CATIA V5 environment. LucidShape CAA V5 Based v2020.06 introduces two new modules-Design and Visualize-that enable designers to quickly conceptualize and design automotive lighting products and generate stunning, physics-based photorealistic images that accurately depict how headlights, tail lights, and signal lights will look in real life.

LucidShape CAA V5 Based includes ease-of-use improvements, such as CATIA Design Tables for efficient simulations of multiple model configurations, and improved design-for-manufacturing

capabilities for automotive light guides. Designers can achieve first-time-right designs and faster time to market with CATIA-integrated optical and mechanical modeling and fully parametric features.

"The Design Table feature in LucidShape CAA V5 Based is a real game changer," said Stuart Falco, optical engineer at Grote Industries. "It enables efficient, in-depth investigations throughout the design process, without the need for tedious model setup or configuration steps. It is a great tool for evaluating multiple design options such as material choices for a component. Design Table also streamlines analysis of manufacturing and assembly tolerances and their impact on photometry. You can enter tolerance perturbations into the Design Table, associate the data with a simulation, and specify the configurations that should be queued for subsequent simulation."

The following features are included in LucidShape CAA V5 Based:

Powerful Design Tools: Geometry creation tools that give users the freedom to focus on overall design objectives rather than the implementation details of complex optics have always made LucidShape unique. These tools are now available to CATIA users in the new LucidShape CAA Design Module. Tools like MacroFocal design features help designers rapidly conceptualize and design freeform reflectors and lenses that meet photometric and aesthetic requirements for cutting-edge automotive lighting products.

Stunning Photorealistic Renderings: Photorealistic visualization is used in the creative process to evaluate the aesthetics of a lighting design, and in the engineering process to evaluate optical feasibility based on uniformity, brightness, and manufacturability. The new LucidShape CAA Visualize Module generates stunning, physics-based photorealistic images. Features like the Environment Light Source and the Human Eye Vision Image tool augment the realism in a scene and enable designers to virtually evaluate how the human eye will perceive a headlight, tail light, or signal light.

Ease of Use and Design-for-Manufacturability: Ease-of-use improvements in the LucidShape CAA Base Module include the CATIA Design Table feature that allows users to construct and simulate design variations quickly. It also streamlines the creation of multiple design forms for a product line. In addition, the Light Guide Design Module provides designers with the capability to efficiently create light guides with fillets that conform to manufacturing constraints. Designers can create light guide designs faster, optimize light distributions and uniformity, and achieve better as-built performance.

"Automotive exterior lighting systems are key safety, styling, and branding attributes for automobiles," said Stuart David, group director of Synopsys' Optical Solutions Group. "Our new LucidShape CAA Design and Visualization Modules allow CATIA V5 users to design lighting systems that meet technically stringent safety regulations within the styling constraints and branding guidelines of any automotive OEM. These new modules give designers powerful geometry creation tools and accurate, reliable visual analyses, all seamlessly integrated within the CATIA V5 workflow environment for first-time-right designs."

1 Click here to return to Contents

Variantum releases VariCPQ Basic for Salesforce

09 June 2020

VariCPQ Basic is an easy-to-use and easy-to-implement sales configurator integrated to Salesforce.

Companies can edit and maintain sales model in excel in Salesforce. Excel modelling rules cover up most of the configuration and User Interface rules with grouping options, dependencies, languages and prices.

Extend your Salesforce lightning experience with VariCPQ Basic:

Web and mobile easy-to-use dynamic interface guides user to select only allowed product combinations and secures that offered product follows company rules. User interface adopts automatically to the sales model and calculates price after each selection.

EXCEL Product modelling is easy and Zero-cost-project approach means that companies can do installation and configuration to Salesforce without external organizations help. After installation just edit couple of settings and edit product model in excel.

After configuration in VariCPQ it returns price and configuration status to opportunity product into Salesforce. Reconfiguration is possible, if user wants to change product selections later on or if customer wants to optimize product price.

VariCPQ Basic benefits

Cost-effective product configurator for Salesforce

Fast to implement, installation is automated from Appexchange and salesforce admin can add Excel to product and modify settings

Comprehensive rule-engine to manage most of the product rules

Easy modeling, if you know your product and Excel, that's it

Automated multilanguage user-interface generation based on Excel

VariCPQ AI analyses product rules and price after each selection

Easy-to-use interface where product selections can be done in any order

Tight integration to Salesforce, price, selections and status are returned to opportunity. VariCPQ Basic uses Salesforce user accounts

Possibility to extend VariCPQ Enterprise if more advanced features needed

Start your 30 day free trial already

today: appexchange.salesforce.com/appxListingDetail?listingId=a0N3A00000FMYhGUAX

Learn more about the VariCPQ Basic solution: variantum.com/solutions/varicpq-basic/

Learn more about VariSales CPQ product family: variantum.com/solutions/varisales/

"VariCPQ Basic appears to offer companies a very flexible, powerful, and low cost of ownership sales configurator for Salesforce customers."

-Stan Przybylinski, Vice President, CIMdata, Inc.

1Click here to return to Contents