

PLM Weekly Summary

Editor: CIMdata News Team

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CIMdata News

Aras Innovator: Architected for the Future - A CIMdata Commentary

04 December 2019

Key takeaways:

Selecting and deploying a product innovation platform is a sizable investment that if done correctly can have a significant impact on the company's return on investment.

Resilient, sustainable solutions consist of much more than apps, the underlying solution architecture and services must be flexible to run on hardware and technology stacks that will be available in the future while supporting easy app development and maintenance.

The Aras platform's underlying architecture has stood the test of time, it performs, scales, and has enabled a wide variety of industrial applications with its low-code development environment.

Available Aras Innovator apps have grown significantly in number and lifecycle scope over the past few years providing out-of-the-box solutions, as well as demonstrating how legacy tools and best of breed apps can be integrated.

Business is about converting energy into value, a conversion that PLM solutions can improve the efficiency of. Efficiency is improved by converting data into information and knowledge that support both innovation and cost savings. Historically, PLM supported innovation by capturing and cataloging data so it could be searched and refenced. More recently, the support of artificial intelligence (AI) and machine learning (ML) are promising to automate portions of the innovation process. Cost reductions are most often created by more efficient work methods and part and knowledge reuse. Reuse avoids complexity and usually reduces cost by avoiding redesign, retesting, and unnecessary inventory. ¹

One of the key characteristics of a robust information technology (IT) platform is sustainability. In other words, IT platforms need to be adaptable, upgradable, and cost effective while at the same time increasing value creation efficiency and velocity for their users and owners. While, legacy bespoke

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¹ Research for this commentary was partially supported by Aras.

solutions have been optimized to a specific set of requirements, they are often unable to address new requirements without significant effort. Within CIMdata's industrial consulting business we are often brought in to assess the current state of a PLM environment and make recommendations for improvement. When the legacy solution is obsolete, years behind on upgrades, too customized to upgrade in a cost-effective manner, and can't meet known, let alone unknown, business needs, a new solution needs to be considered. At the top of the consideration list are usually costs and benefits, often expressed as return on investment (ROI) over a specific period of time. Recently consideration has expanded to include long-term sustainability of the solutions being evaluated.

With PLM, like most enterprise solutions, the costs are sizable and often include licenses, maintenance, subscriptions, implementation services, training, and support. Over five years, the total cost of ownership (TCO) per PLM Solution user can exceed US\$20,000, a significant sum. Unfortunately, the opportunity costs from not investing in advancing PLM are even higher. The following simple example demonstrates the opportunity cost:

Revenue per employee commonly ranges between US\$100,000 and US\$300,000 for discrete manufacturing companies. For this example, we will assume US\$200,000 per employee. A common innovation target to ensure business sustainability is to replace 20% of revenue annually with new products, \$US40,000 for this example, US\$200,000 over 5 years.

So, a US\$20,000 investment has the opportunity to support US\$200,000 in new revenue, a 10:1 return. The actual number may not be this large as there are many other costs and constraints, but the opportunity potential is still very large, and when we perform ROI analyses the returns are impressive validating the opportunity cost premise proposed here.

The question for our clients often becomes "how do we capture as much of this potential as possible? Can we enhance our existing solution, or do we need to rip and replace?"

Sustainability

PLM solution sustainability is a concept that is critical to digital transformation and has many dimensions. Being cloud native, multi-tenant, or having an app for every business function does not make a solution sustainable. CIMdata defines PLM solution sustainability as "the platform's ability to support a company's data and process management requirements over a long period, at a reasonable cost, even as the business needs evolve."

A product innovation platform is the current state of the art way in which to evaluate a sustainable PLM solution. Through our research we have identified and published² the most important characteristics of a product innovation platform, and they include:

Through-Life configuration – The platform's ability to manage a product's configuration from concept management and traceability through its entire lifecycle and provide traceability forward and backwards.

Process and knowledge – The platform's ability to represent business processes and capture process management outputs, as well as capture and organize data representing knowledge.

Upgradeability – The platform's ability to easily be updated to use a newer version of a solution.

CIMdata has published a lot on product innovation platforms and PLM solution sustainability. From our research we have found that with a good implementation plan, and proper process design and people support, it should be possible to get a decade or more of strong ROI from a technology platform

² https://www.cimdata.com/en/resources/complimentary-reports-research/position-papers/item/8484-product-innovationplatforms-definition-their-role-in-the-enterprise-and-their-long-term-viability-position-paper

investment.

Aras Innovator, History, and Plans

Aras Innovator was architected from its inception to be sustainable. Mr. Peter Schroer, Aras' CEO and founder, and the other founders learned from the limitations of earlier PLM solutions and made a bet that service-oriented architectures were the path forward. They understood and sought to enable key product lifecycle data and process management requirements to support common use cases. This background enabled Aras' founders to define generic services that could act as building blocks to meet lifecycle management requirements. Another key requirement they understood was that change happens and enterprise software must be able to change quickly and easily to meet new requirements.

Those early choices have been proven correct and are best validated by Aras' upgrade policy, where Aras subscribers are updated to the latest version by Aras for free, no matter how much customization they had performed. Aras has upgraded hundreds of clients enabling them to receive the latest capabilities from the current platform release. While cloud native PLM solutions include upgrades, CIMdata has not seen one that has the breadth of solutions, configurability, and licensing flexibility of Aras Innovator. CIMdata sees these characteristics as critical, to get to a future-proof single source of truth. If a solution cannot easily support all data and processes within a company's lifecycle, disconnected data silos will not be eliminated and continue to be created thereby requiring the organization to potentially rip and replace.

Aras has been in the press often over past few years due to big sales wins, and recent large investments from venture capitalists. These funds are being used for a variety of purposes that a growing company has. While these purposes all have their value, the most important investment they are making for their customers is in Aras Innovator's core architecture, the platform defined by the web services and new solutions built on those services, e.g., requirements engineering, MRO, and simulation process and data management. While companies have built custom solutions to support these and other critical lifecycle domains, extending the services with recently acquired intellectual property will create new building blocks that enable customers to create better solutions faster.

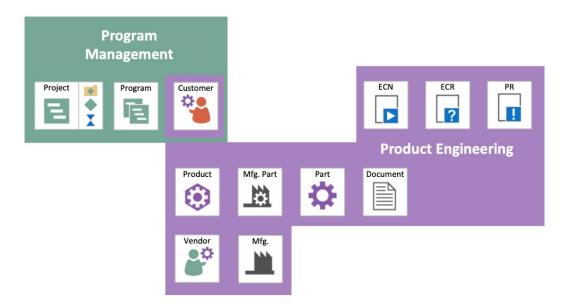


Figure 1–The Original Aras Innovator Out-of-the-Box (OOTB) Apps Circa 2007

Recently, CIMdata had a chance to review a number of topics with Mr. Schroer, during which, he commented that Aras has formalized their mission: "We're reinventing software for engineering and manufacturing to empower our customers with the flexibility to overcome tomorrow's challenges." He further stated, "The increasing importance of (and risk associated with) software and electronics, the impact of compliance, the challenges of continuously field upgradeable products, and the opportunity for pervasive simulation all demand a new approach to PLM." **Figure 1** illustrates the apps that were available in 2007. The scope of the current platform is depicted in **Figure 2**. The basic services such as workflow, lifecycle, and vault have been available from the initial release in 2003, but over time they have been enhanced, and more importantly to end users, so have the number and capabilities of the out-of-the-box apps available on the platform. Finally, Mr. Schroer noted that, "The current sales-driven processes misalign the motivations of the customer and vendor [i.e., PLM solution provider]. We need to balance the risk between the parties, and eliminate the wasted capital inherent in the current processes."

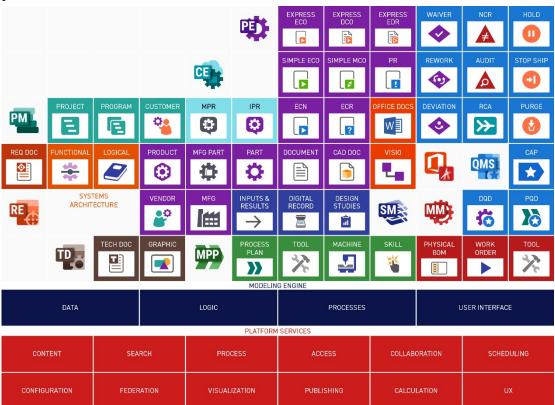


Figure 2—The Aras PLM Platform, Apps, Services, and Clients

CIMdata has heard both of these concepts from Mr. Schroer previously. We believe that he has generally achieved them. The enterprise open source software delivery model enables companies to experiment and even put into production an industrial strength PLM solution without paying Aras anything. CIMdata sees this as much more than "try before you buy" or a "Freemium Model." Most freemium models monetize the user, Aras doesn't. This is an innovative business model that reduces risk for Aras' clients

It is also important to note that the Aras PLM platform services have been configured into a wide variety of OOTB solutions that can be extensively tailored and reconfigured. Aras Innovator has always been a type of low-code environment for the creation of enterprise applications. The user interface, data model,

and process model are all created and maintained using a graphical editor (i.e., no coding required), while business logic is created using a scripting language. Additionally, changes can be controlled through a deployment process or immediately activated in a live environment. These complete, custom solutions are upgradeable just like the OOTB apps. More information on <u>Aras upgradeability</u> is available in a commentary published earlier by CIMdata.³

While large discrete manufacturing wins are often promoted, the open source developments are also quite interesting. For example, a school administration solution has been developed in India, a medical practice management solution has been developed in Switzerland, and support for Building Information Management (BIM) has been created by several AEC firms. While these applications don't generate revenue for Aras, they do show the flexibility of the Aras PLM platform and part of the reason why Mr. Schroer is so bullish about Aras' growth potential. They are actively courting software companies to incorporate the Aras platform into their solutions.

To further illustrate Aras' impact on the PLM market, Aras has received US\$110M from investors over the past two years to accelerate their growth. Additionally, they have completed two acquisitions of intellectual property (IP) to expand their lifecycle coverage to simulation process and data management (SPDM) and maintenance, repair, and overhaul (MRO). Several subscribers are working on early releases that support simulation management and the as-maintained BOM for assets in the field and CIMdata is looking forward to seeing the production releases in 2020 and presentations at ACE 2020 demonstrating what additional use cases can be supported, as well as what apps can be configured when these services are incorporated into the core platform.

Another big project at Aras Mr. Schroer elaborated on was the move of the organization to Scaled Agile Framework (SAFe). He claims this approach combined with the Aras platform will enable Aras to accelerate capability incorporation and expansion into the Aras solution. At ACE Europe, it was noted that the release cadence is every 6 weeks, and the goal is to drop it to every 4 weeks in 2020.

While the Aras web service architecture has been well proven, a big effort in process is refactoring services into microservices. Microservices are a critical architectural strategy to successfully support cost effective cloud deployments. CIMdata sees the migration to microservices as being critical both for cloud deployments and to improve on-premise performance via parallel processing of threads.

Mr. Schroer's final comments were on the future of Aras. He reaffirmed that they intend to go public, and within 5 years have annual recurring revenue of several hundred million dollars, a bold target to put on record. There will be some acquisitions to achieve this goal, as well as significant growth in the PLM mid-market. Finally, Mr. Schroer stated he anticipates 10% of the revenue to come from OEM software licensing such as what is currently being done with Infor and an unnamed major software company. Plans like these are why CIMdata includes Aras in our mindshare leader list.

Conclusion

Innovation is well understood as a key strategy to long-term success, but it needs to be enabled by appropriate technology so it can be scaled and executed successfully. Digital transformation projects are expensive not from software cost, but from the cost of changing how an organization gets its work done. Smart companies understand this and are migrating to a platform approach for their digital transformations. They plan to have the flexibility to adapt to future requirements quickly without retooling again. This requires a resilient technology foundation and the ability to quickly configure apps to solve new and changing business issues.

³ https://www.cimdata.com/en/resources/complimentary-reports-research/commentaries/item/10115-aras-plm-platform-redefining-customization-upgrades-commentary

Designing and maintaining a software platform that can meet requirements for twenty years or more is a complex process. Aras has done just that, solutions configured at several early customers continue to function on the latest Aras platform release while leveraging new features, capabilities, and improvements added to the platform since its first production release in 2003. Aras Innovator has been a low-code platform from its inception and has been used to develop a wide variety of solutions both within target markets and outside them.

The software technology industry is similar to the financial industry in that past performance does not predict future performance, but given the stickiness of enterprise software, the recurring revenue model, and business and technology momentum, Aras and its application architecture appear to be sustainable long into the future. The Aras PLM platform belongs on a short list for companies looking for a flexible platform that can meet their current and long-term PLM requirements.

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CIMdata to Join a Webinar on the Ways that Automakers in India Meet Emissions Standards 03 December 2019

CIMdata, Inc., the leading global PLM strategic management consulting and research firm, announces that its President & CEO, Peter Bilello, will take part in a webinar to discuss the challenges faced by the Indian automotive industry in certifying their vehicles against the Bharat Stage IV emission norms.

With one of the largest automobile markets in the world the Indian government has instituted a series of emissions standards designed to regulate the output of air pollutants from internal combustion engines and spark-ignition engines equipment. With the Bharat Stage IV emission norms in place, automakers in India are facing stiff challenges in certifying their cars.

This webinar will show how realistic simulation solutions can help automakers in India meet these challenging regulatory targets by streamlining the certification process with full traceability—from design, portfolio management, requirements, test results, to verification.

Mr. Bilello has more than 35 years of experience in the development of business-enabling IT solutions for research, engineering, and manufacturing organizations worldwide. He has participated in PLM analysis, selection, implementation, and training; CAD/CAM/CAE/CIM implementation and management; synchronous and lean manufacturing consulting; software engineering; and general data management strategy development and support. He has authored numerous papers and research reports on PLM, digital transformation, and related topics, and his articles, commentaries, and perspectives have appeared in publications throughout the Americas, Europe, and Asia.

The webinar, BS VI Norms Helping Automakers Contribute to a Cleaner and Greener Environment, is sponsored by Dassault Systèmes and will take place on Tuesday, 12 December at 4:30 p.m. IST / 6:00 a.m. EST and will last one hour. To learn more or register, visit

https://www.cimdata.com/en/events/cimdata-supported-events/event/515-webinar-helping-automakers-contibute-to-a-cleaner-and-greener-environment

Acquisitions

Accenture Acquires Australian Government Specialist Consultancy Apis Group

04 December 2019

Accenture has acquired Apis Group, a privately held Australian consultancy with deep industry expertise providing strategic advisory, digital design and delivery services to government organisations. This acquisition will bring additional capacity and further strengthen Accenture's services to government and health clients in Australia.

Headquartered in Canberra, Apis Group was founded in 1999 and employs more than 120 professionals. The firm works with some of Australia's largest federal public service organisations, providing strategic advisory services, project management, business and digital design services. The diverse team has extensive experience working on service delivery reform initiatives, including social services, health, aged care, education, employment and environment sectors, with a track record of helping government shape and deliver major transformation programs.

"Apis Group's extensive experience working with public service organisations complements Accenture's established credentials across government," said Louise May, who leads Accenture's Health & Public Service practice in Australia and New Zealand. "Apis Group's talented team of professionals brings in-demand industry expertise and consulting skills that align with our offerings to government clients. This acquisition will bolster our position as partner of choice for government and health organisations, who will benefit from the deep specialist expertise of Apis combined with Accenture's world-class digital transformation capabilities."

"The opportunity to become part of Accenture presents new potential and great possibilities for our business, our clients and our people," said Anthony Honeyman, Chairman and a partner at Apis Group. "We are particularly excited about the opportunity to leverage Accenture's deep digital and analytics capabilities. By combining our skills, expertise and client relationships, we can enhance our offerings to government clients including deploying digital services that deliver enhanced experience to citizens in their dealings with government."

Bob Easton, chairman of Accenture in Australia and New Zealand, said, "The acquisition of Apis Group is the latest demonstration of our continued investment in Australia and our commitment to growing our capabilities in areas where we have ongoing client demand and new opportunities."

This transaction follows other acquisitions by Accenture in Australia over the past year, including those of cybersecurity and technology company BCT Solutions in June 2019; big data and analytics company Analytics8 in August 2019, and PrimeQ, an Oracle software-as-a-service cloud implementation service provider, in December 2018.

In its 2019 fiscal year, Accenture invested nearly US\$1.2 billion globally on 33 acquisitions to acquire critical skills and capabilities in strategic, high-growth areas of the market.

Cadence to Acquire AWR Corporation from National Instruments to Accelerate System Innovation for 5G RF Communications

03 December 2019

Cadence Design Systems, Inc. and National Instruments Corporation announced that they have entered into a definitive agreement pursuant to which Cadence expects to acquire AWR Corporation, a wholly owned subsidiary of National Instruments (NI). AWR is an industry leader in high-frequency RF EDA software technology and will bring a highly talented RF team to Cadence. Concurrently, Cadence and NI also entered into a strategic alliance agreement to expand their relationship to enhance electronic system innovation with a focus on communications.

AWR software is used by microwave and RF engineers to design wireless products for complex, high-frequency RF applications. The technology helps customers accelerate the design and product development cycle of systems used in communications, aerospace and defense, semiconductor, computer, and consumer electronics, by helping reduce the time it takes to go from concept to manufacturing.

"Companies designing communication and radar chips, modules and systems face increasing time-to-market pressure in high-growth 5G/wireless applications. Creating differentiated products while reducing cycle time requires a seamless design, simulation and analysis environment," said Dr. Anirudh Devgan, president of Cadence. "The addition of AWR's talent and technologies will enable us to provide more integrated and optimized RF design solutions, thereby further accelerating system innovation as we execute our Intelligent System Design strategy."

Designers are challenged with the traditional RF/microwave design flow, which consists of processes that are error-prone, resulting in a loss of productivity and capability. Customers can benefit from a seamless integration connecting the AWR® Design Environment with the Cadence® Allegro® PCB Designer and the industry-leading Virtuoso® and Spectre® platforms for RF integrated circuit (IC) design excellence. Electromagnetic and thermal analysis is often difficult and tedious for a designer to setup and use. To address this, the integration also includes Cadence system analysis tools such as the Clarity™ 3D Solver, Celsius™ Thermal Solver and Sigrity™ PowerSI® technologies.

"RF/microwave/mmWave applications need best-in-class solutions to achieve first-pass success with optimal design performance," said Joseph E. Pekarek, general manager of AWR. "By joining forces with Cadence, our goal is to be able to leverage the strength and heritage of the Virtuoso and Allegro platforms along with the AWR Design Environment platform to deliver complete solutions for complex ICs, packages and boards."

The flows resulting from the integration of AWR technology with Cadence computation software are expected to be tightly connected with the NI LabVIEW and PXI modular instrumentation systems and semiconductor data platform as part of a new strategic alliance. For more information on the Cadence and NI strategic alliance, please visit ni.com/nati/news.

Under the terms of the definitive agreement, Cadence will pay approximately \$160 million in cash at closing and expects approximately 110 AWR employees to join Cadence. The acquisition is expected to close in the first quarter of 2020 and is subject to customary closing conditions, including regulatory approval.

Siemens buys additive manufacturing software developer Atlas 3D

03 December 2019

Siemens has signed an agreement to acquire Atlas 3D Inc., a Plymouth, Indiana-based developer of Sunta software that works with direct metal laser sintering (DMLS) printers to automatically provide design engineers with the optimal print orientation and requisite support structures for additive parts in near real-time.

Atlas will join Siemens Digital Industries Software, where its solutions will expand additive manufacturing capabilities in the Xcelerator portfolio of software.

With Atlas3D, designers and manufacturing engineers can quickly gain insights into the optimal part build orientation in order to minimize supports, distortion, effort to remove supports, part material, and printing time. Photo Credit: Siemens

Atlas' Sunata software uses thermal distortion analysis to provide a simple, automated way to optimize part build orientation and generate support structures. This approach allows the designer – rather than the analyst – to perform these simulations, thereby reducing the downstream analysis that needs to be conducted via Simcenter software to achieve a part that meets design requirements.

Siemens plans to make the Atlas solution available through its online Additive Manufacturing Network.

"We welcome Atlas to the Siemens community as the newest member of our additive manufacturing team. Our solutions industrialize additive manufacturing for large enterprises, 3D printing service bureaus, design firms and CAD designers," said Zvi Feuer, senior vice president, manufacturing engineering software of Siemens Digital Industries Software. "The cloud-based Sunata software makes it easy for designers to determine the optimal way to 3D print parts for high quality and repeatability. The combination of Sunata with the robust CAE additive manufacturing tools in Simcenter enables a 'right first time' approach for industrial 3D printing."

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Trimble Expands its VRS Network Footprint with the Acquisitions of Can-Net and iBase Networks 06 December 2019

Trimble announced the acquisitions of Cansel Survey Equipment's Can-Net and AllTerra New Zealand's iBase networks. The acquisitions significantly increase the global footprint of Trimble-owned Virtual Reference Station (VRS) networks by adding key geographies in North America and New Zealand. Subscription-based VRS correction services are now accessible to more customers around the world who rely on high-accuracy corrections to increase productivity and reduce operational costs. The correction services are ideal for professionals in agriculture, geospatial and construction as well as emerging high-accuracy applications, such as on-road positioning for passenger vehicles. Financial terms were not disclosed.

Trimble is transforming how and where users can leverage precision and accuracy by:

Deploying and acquiring networks and services worldwide that deliver high-accuracy positioning nearly anywhere in the world, making Trimble a leading provider of corrections in urban, suburban and even the most rural areas.

Continuing to advance GNSS corrections technology that enables industries to re-think what is possible when using augmented positioning for improving safety, performance, productivity and operational efficiency, whether in the field or on the road.

Empowering emerging consumer markets by delivering absolute positioning for passenger vehicles, enabling Advanced Driver Assistance Systems (ADAS) to maintain precise in-lane positioning.

The Can-Net and iBase acquisitions add over 1.1 million square kilometers (over 425,000 square miles) to Trimble's correction services coverage that has grown robustly over the past eight years, contributing to Trimble's shift toward software, services and subscription business emphasis.

The Can-Net network is comprised of multiple VRS networks and single-base solutions offering GNSS corrections across Canada. The acquisition provides Trimble with the largest VRS footprint in Canada, covering over one million square kilometers (over 386,000 square miles). Subscribers primarily work in the agriculture, survey and construction industries. In addition, the Can-Net network enables Trimble corrections technology to be utilized by automotive stakeholders deploying ADAS systems along the Trans-Canadian Highway.

The iBase network expands Trimble's VRS footprint across both the north and south islands of New Zealand, totaling over 100,000 square kilometers (over 39,000 square miles).

"The high-accuracy precision provided by VRS technology is a powerful tool in driving operational and financial efficiency for industries that require easy access to positioning services," said Patricia Boothe, vice president of Trimble's Advanced Positioning Division. "We are aggressively expanding the accessibility of VRS corrections around the globe. Our vision is to make high-accuracy positioning available to the broadest base of commercial users worldwide for applications in agriculture, construction, automotive, autonomy and others where precise positioning is a critical part of the solution. Trimble will continue to invest in technology and infrastructure to push the boundaries of performance and accessibility for our portfolio of services."

Trimble networks are supported by a global network operations team made up of GNSS system engineers, geodesy experts and IT professionals. The team monitors the networks 24/7 from operation centers located on three continents, ensuring consistent and reliable service uptime and performance integrity.

Trimble-owned VRS networks are accessible now in Canada and New Zealand as well as Eastern Australia and Tasmania, France, Belgium, the Czech Republic, Estonia, Germany, Great Britain, Ireland, Luxembourg, the Netherlands, Sweden and areas throughout the U.S.

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Company News

Cadence and National Instruments Enter into Strategic Alliance Agreement to Enhance Electronic System Innovation

03 December 2019

National Instruments Corporation and Cadence Design Systems, Inc. Announced a system innovation

strategic alliance to create an integrated design to test flow, leveraging reusable data and test IP from electronics design and verification to validation and production test for electronic system and semiconductor companies. This strategic alliance builds upon the broad-ranging collaboration that National Instruments (NI) and Cadence initiated in 2018 to improve the overall semiconductor development and testing of next-generation wireless, automotive and mobile integrated circuits (ICs) and modules. Through the strategic alliance agreement, NI and Cadence expect the joint development of technology, methodology and intellectual property to streamline electronics development.

The objective is to provide customers with a seamless flow from pre-silicon development to post-silicon test, leveraging design, verification and analysis data between Cadence and NI technologies. The collaboration is anchored in analog, mixed-signal and RF integrations around the Cadence® Virtuoso® and Spectre® platforms, and physical data from the NI LabVIEW and PXI modular instrumentation systems, which customers can use to enhance system design via a comprehensive flow from concept to volume production to help them achieve faster time to market and lower overall costs.

"The rapid product expansion in the wireless, consumer, automotive, and aerospace and defense market segments calls for an accelerated pace of system innovation and collaboration," said Lip Bu Tan, chief executive officer at Cadence. "By working even more closely with NI on this strategic alliance, we aim to deliver an integrated flow from pre-silicon mixed-signal design and verification to post-silicon +validation and test, shortening the overall time to electronic product creation."

Cadence and NI also plan to collaborate to define and build a common, connected flow enabling re-use of mixed-signal testbenches and stimulus from pre-silicon design verification to post-silicon validation and production test. Reusable test IP helps customers accelerate their time to market and reduce errors. A goal of the collaboration is to better integrate flows for analog/mixed-signal and RF ICs and modules from design to test.

"Cadence is the ideal partner for National Instruments as we work together to define the next generation of design to test methodology," said Alex Davern, chief executive officer at National Instruments. "By combining NI's advanced semiconductor validation and test systems with Cadence's industry-leading technology in analog mixed-signal and RF design and verification, we can help our customers accelerate time to market, reduce costs and improve product quality. We look forward to working with Cadence to make this vision a reality in a fast-paced environment."

In addition to the strategic alliance agreement, Cadence and NI have entered into a definitive agreement pursuant to which Cadence expects to acquire AWR Corporation, a wholly owned subsidiary of NI. For more information, please see www.cadence.com/go/awracquisition.

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Dassault Systemes 3DEXPERIENCE Lab Accelerates Expansion and Consolidates Global Network to Develop Projects That Positively Impact Society

04 December 2019

Dassault Systèmes announced new milestones for its 3DEXPERIENCE Lab open innovation laboratory and accelerator program. Furthering its mission to nurture disruptive innovations that positively impact society, Dassault Systèmes has extended the 3DEXPERIENCE Lab's reach by welcoming new startups, incubator partners and fab lab partners into its global ecosystem. The announcement was made at the 3DEXPERIENCE Lab Rendez-vous event December 3 at the Atelier des Lumières digital art center in

Paris.

Fifteen new startups hailing from Belgium, China, France, India, South Africa and the U.S. have joined the 3DEXPERIENCE Lab accelerator program, where they can access the 3DEXPERIENCE platform to digitally develop transformative projects that contribute to one or more of the United Nations' Sustainable Development Goals to impact society, as well as benefit from mentoring and expertise. Startups include: AgreenCulture (smart agriculture robotics), DAMAE Medical (device to detect skin cancer), FEops (patient-specific simulations for heart interventions), Gyrolift (new mobility solution), Inali (affordable hand prosthesis), PKvitality (bio-wearable solution for diabetics), and SparkCharge (portable and ultrafast electrical charging unit). Community-based projects include Magic Wheelchair (non-profit organization that builds epic costumes for kids in wheelchairs) and Open R2 (to design and engineer the famous robot R2-D2).

The startups are the latest additions to an accelerator program that has reviewed more than 500 ideas, many of which have significantly advanced in their development: Biomodex is now producing its 3D-printed personalized organs for simulation of surgery, opened an office in Boston, and raised its second round of funding; EEL Energy successfully tested its membrane with a French institute; Syos has now sold more than 11,000 tailored musical instruments; and XSun showcased its unmanned long-range solar drone at its own booth at the Paris Air Show.

Since establishing the 3DEXPERIENCE Lab in France in 2015, Dassault Systèmes has expanded it to the U.S. and India, and now counts more than 25 incubator, accelerator, educational, entrepreneurial, technology and fab lab partners worldwide. As an open collaborative accelerator, it has also teamed up with multinational companies to co-accelerate promising projects in specific industries. Its growing community of 1,200 mentors provides expertise in disciplines ranging from design and simulation to regulatory and marketing.

New partners in 2019 include startup incubators MIT Enterprise Forum CEE in Poland, Greentown Labs in the U.S., Centech in Canada, OuiCrea in China, and Tshimologong in South Africa; the business school HEC in France; and the Communautique FabLab in Canada.

"The 3DEXPERIENCE Lab is an example of the power of collective intelligence, open innovation, and digital cloud platforms to enable breakthrough innovations for the greater good that align with the United Nations' Sustainable Development Goals," said Frédéric Vacher, Head of Innovation, Dassault Systèmes. "Dassault Systèmes is looking extensively to support these goals through early stage startup projects and communities, to further reinforce this mission and contribute from the bottom up to make a better world."

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Eurostep recognised as one of the 20 most promising collaboration solutions providers of 2019 by CIOReview magazine

03 December 2019

Eurostep has been recognised as the editor's choice of the 20 most promising collaboration solutions providers of 2019 by CIOReview magazine.

CIOReview magazine is a leading technology magazine bridging the gap between enterprise IT vendors and buyers. Serving as a platform for the C-suite executives, industry experts, and other decision-makers. CIOReview provides information about forefront business solutions and services by sharing valuable insights, opinions of C-suite executives and paradigm changing business leaders about new technology trends in the market.

Read their latest article "Eurostep Group: Driving Towards Cloud Based Business Collaboration" about how our new ShareAspace cloud solution is adding value to the business ecosystem lowering the threshold to business collaboration for small and medium enterprises.

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Gerber Partners with Fellow Technology Platform Pioneer, Suuchi Inc., to Help Reinvent the Supply Chain

04 December 2019

Suuchi Inc., has selected Gerber Technology as its CAD software partner. By implementing Gerber Technology's AccuMark 2D and 3D software, Suuchi will be able to offer clients greater speed-to-market and more efficiency, reducing waste created in the development phase. Suuchi recognizes Gerber Technology as a game-changing enabler of delivering greater value to its customers.

"Everyone in the industry is aware of how time consuming and wasteful physical samples can be, which is why many companies are starting to look at 3D solutions," said Enrico Zamarra, Gerber's Director of Digital Solution Sales for the Americas. "Unlike many of the 3D solutions on the market, what makes Gerber different is that the virtual samples produced in AccuMark 3D are made from real pattern data, which ensures that what you're seeing on the screen can actually be produced, improving fit and greatly reducing the need for physical samples."

"By shortening design cycles and eliminating physical samples, we are further delivering on our promise to our customers," said Suuchi Ramesh, founder and CEO of Suuchi Inc. "We are thrilled to be merging forces with another pioneer in the apparel CAD technology landscape and working towards our joint mission of reinventing supply chains."

Suuchi Inc. delivers clients its cloud-based technology, the Suuchi GRID, as a stand-alone solution or by connecting the GRID with Suuchi's curated network of more than 250 materials suppliers and more than 400 Americas-based factories. It provides an integrated data store by digitizing the supply chain, delivering transparency from design through production and distribution. The software enables streamlined communication, collaboration and predictive analytics, thereby driving effective planning decisions for its customers. Suuchi is helping more than 200 emerging to enterprise fashion brands double their margins and deliver product to their consumers up to 20 times faster while reducing excess inventory, markdowns, and landfill waste. Gerber's 3D software, which provides true to life virtual samples, helps the tech company deliver on its promise to customers by shortening the development stage and eliminating excess waste from multiple sample rounds.

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Identify3d signs partnership with Siemens, updates collaboration with EOS

03 December 2019

Identify3D, a San Francisco-headquartered software company, has announced it has signed an OEM partnership with Siemens Digital Industries Software, the automation and digitalization software branch of industrial manufacturing company Siemens.

This partnership will enable the integration of Identify3D's security suite within Siemens' software solutions. Both companies aim to support customers in creating automated, end-to-end, secure and

controllable manufacturing data distribution across multiple control systems and production equipment.

"Through a standardized data model and end-to-end integration, Siemens customers can lower operating costs by interacting more efficiently with machines," explains Fabrizio De Pasquale, VP Business Development and Strategic Accounts at Identify3D.

Additionally, Identify3D has also provided an update on its collaboration with leading German 3D printing OEM EOS. Showcased at Formnext 2019 last week, Identify3D's secure and standardized communication solution has also been paired with EOS' additive manufacturing machines.

Creating an integrated machine interface with secure data transfer

Within an end-to-end digital manufacturing process chain, the suite integrates intellectual property protection, manufacturing repeatability, and traceability to counter security threats and to protect confidentiality and integrity of data. This is carried out through three applications. Firstly, with Identify3D Protect, users are able to create a cloud-based encryption service for build files and group them with business and production licensing rules.

Then, Identify3D Manage enables the secure digital distribution of these assets. Finally, Identify3D Enforce authenticates and decrypts the secure container and implements the business and production rules during manufacturing.

In its newly announced partnership with Siemens, customers can now utilize an integrated solution of the Identify3D suite with NX, Teamcenter and Opcenter software. Siemens software users are therefore able to create encrypted data containers filled with instructions for the operation of additive manufacturing machines, as well as subtractive technologies. These instructions include machine parameters, machine type, operator privileges, number of parts allowed, and more. Once the 3D printer receives the container, it is unencrypted by the machine, and production begins.

The containers can be traced through the digital manufacturing operation, with every action affecting it displayed in a dashboard for full visibility of the production process. Both Identify3D and Siemens have been working with a number of 3D printer OEMs in order to create integrated machine interfaces that supports secure data transfer. Recently, 3D printer manufacturers like Renishaw and Solutions have partnered with Identify3D to integrate the company's security suite into their 3D printing workflow. Both partnerships have been established to secure data and protect intellectual property (IP) in additive manufacturing.

"Following a multiyear partnership with Siemens, we are very happy to make one further step towards a broader commercialization of our solution. We are very keen on bringing a key innovative addition to the Siemens Digital Industries Software portfolio and excited to support their global sales organization," added Fabrizio De Pasquale.

EOS and Identify3D's partnership began in 2016, where they opted to collaborate in order to support EOS machine users needing an automated, end-to-end, secure and controllable data distribution/collection. Identify3D has used the EOS Software Development Kits, EOSPRINT and EOSCONNECT, to develop an integrated Digital Rights Management solution. This creates added security for EOS machine customers along the shop floor as it gives the user control over distributed manufacturing data.

Using CAD/CAM applications, customers are now able to create the encrypted data containers for EOS 3D printers to consume for production, along with the instructions for how the data is to be used. Transactions and machine data can then be traced and collected into the digital thread of the 3D printed part.

Rüdiger Herfrid, Product Line Business Owner EOSPRINT, comments: "EOS has taken a strong lead in developing partnerships that enrich the additive manufacturing ecosystem and has recognized data control and traceability as one of the key topics for AM. Identify3D is a partner who optimally uses the open EOS interfaces of EOSPRINT and EOSCONNECT to develop a fully integrated workflow solution for EOS customers."

Demonstrating a focus on security in the 3D printing ecosystem, EOS has also recently entered into a Digital Rights Management agreement with security technology specialist Wibu-Systems. Together, the companies have developed an API enabling Wibu-Systems and other DRM vendors to securely connect with EOS machines.

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Kubotek3D Joins the Pacific Northwest Aerospace Alliance

05 December 2019

Kubotek3D announced their membership to the Pacific Northwest Aerospace Alliance (PNAA). The PNAA, a non-profit organization, is a coalition of aerospace companies and industry leaders serving North America's largest commercial aerospace manufacturing cluster, centered around The Boeing Company in Washington state.

Kubotek3D has a long history of supporting aerospace industry needs through engineering software solutions and now joins with PNAA members and affiliates around the world working to strengthen the manufacturing supply chain through dynamic events designed to inform aerospace leaders, connect aerospace interests, and inspire industry collaboration and innovation. Andre Beaupre, General Manager of Sales and Support at Kubotek3D, sees great benefits to joining the alliance. "We've been helping aerospace suppliers to manage changes to their product data for more than a decade," explains Beaupre. "Joining PNAA gives us an opportunity to not only share our experiences but also get additional insight regarding the needs of the aerospace supply chain."

Kubotek3D will be exhibiting at the PNAA annual aerospace conference in Lynnwood, WA, February 3-6.

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Mastercam Officially Sponsors SAE International Competitions

02 December 2019

Mastercam, CAD/CAM software developed by CNC Software, Inc., is pleased to announce a development in its relationship with SAE International. In the past, Mastercam has provided free software and support to teams participating with SAE. Now, Mastercam has formalized a sponsorship of Formula SAE (FSAE) and Baja SAE to support these programs as an official equipment supplier for participating student teams.

With the sponsorship, FSAE and Baja SAE teams gain free access to Mastercam 2020 for a full year, along with technical support. "Mastercam is excited for the opportunity to be a sponsor of SAE International's Collegiate Design Series and Baja SAE competitions," says Carter MacCoy, Educational Programs Specialist. "These competitions prepare engineering students for future employment in

mobility-related industries by challenging them with a hands-on, team experience that includes design and manufacturing. For years, we have proudly sponsored the local University of Connecticut FSAE team and some team members have ended up at Mastercam as interns and employees, so we know first-hand the positive effect SAE has on all those involved."

SAE International is the leader in connecting and educating engineers while promoting, developing, and advancing aerospace, commercial vehicle, and automotive engineering. In FSAE, teams of undergraduate and graduate university students from around the world develop, manufacture, and compete with small, formula-style vehicles. In Baja SAE, engineering students develop, manufacture, and compete with single-seat, all-terrain sporting vehicles that serve as prototypes for the consumer market. Students are tasked with all aspects of managing these large-scale projects.

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Mastercam Partners with TITANS of CNC

05 December 2019

CNC Software, Inc., developers of Mastercam, has announced a new partnership with TITANS of CNC, Inc. to help train the next generation of highly skilled CNC machinists and eliminate the widening skills gap. The organizations have entered into a three-year partnership to develop media that advocates for CNC education and high-level aerospace manufacturing processes.

Mastercam is widely used CAM in industry and education worldwide. The software is popularly used in companies requiring precision machining, such as shops in the automotive and aerospace industries.

TITANS of CNC is a free educational platform, consisting of more than 3,000 online courses, that guides students and teachers through CNC machine operation and programming. The Academy consists of online courses in fundamentals, learning CAD, CAM, advanced work holding, 5-axis, and more. The organization has an expansive following among students and professionals in manufacturing and are preparing the release of TITANS of CNC: Aerospace Academy – a tutorial-based platform teaching high-level manufacturers the skills necessary to produce complex aerospace parts using the most difficult materials

"We are proud to partner with such an inspirational team," said Meghan West, President, CNC Software, Inc. "From the beginning of our existence, CNC Software has made a concerted effort to address the educational market. We have always recognized the importance of recruiting young minds into our field. TITANS of CNC has made it their mission to do just that. We are proud and humbled to be working with such a wonderful group of people that have the same mission," West continued.

As a result of this partnership, TITANS of CNC will feature Mastercam in the production of videos for education and social media purposes. As a champion of the Mastercam brand, TITANS of CNC will engage more than 70,000 users with the world's most widely used CAM software. Within TITANS of CNC Aerospace Academy, the organization will position Mastercam as the single most important CAM technology partner for success.

"TITANS of CNC is proud to partner with Mastercam, a leader in CAM systems globally," says Titan Gilroy, CEO, TITANS of CNC, Inc. "As our Academy continues to grow, we believe it is necessary to teach with the latest, most-advanced CAM software and machining technology available. Knowledge is power, and what we teach has a direct effect on manufacturing companies' ability to outperform their competitors."

Gilroy continues, "We are stepping up to the pinnacle of CNC machining education, introducing our

new "Aerospace Academy" in early 2020. With the presence of ITAR regulations and restrictions, utilizing Mastercam as our advanced CAM solution makes perfect sense.

We will be utilizing Mastercam to produce the majority of our upcoming aerospace tutorials, which will live on our FREE Aerospace Academy website. In addition to these extremely detailed and difficult projects, we will be recreating our Rocket Series, Building Blocks Series, and The Art of Fixturing Series in Mastercam."

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New Study by TCS: German Companies Have Sharply Hiked Spending on Digital Transformation 04 December 2019

Tata Consultancy Services published the findings of a commissioned research that revealed that German companies have sharply increased their investment in digitization and are focusing on change management and agile processes to drive their transformation initiatives. The study titled 'Don't Panic! Keep Calm and Digitize' focused on German companies having 100 or more employees, polling 953 senior managers and decision-makers responsible for digitization within their organizations.

German companies are focusing on the necessary change management processes in addition to the use of new technologies in their transformation journey. According to the report, almost every second company (47 percent) uses change management methods to adapt to new structures and prepare the workforce, versus 36 percent in 2017. Among large companies with 500 or more employees, 57 percent rely on change management methods. In more than one third of the companies (35 percent), the change process is the responsibility of the digitalization units or the Chief Digital Officer. In around one in four companies, the management or the executive board (26 percent) or internal corporate communications (23 percent) is responsible.

For project management, companies are more likely to rely on agile methods. For example, 43 percent of companies now state that they sometimes, mostly or always use agile methods (vs 35 percent in 2018). Agile adoption is even greater among large companies with 500 or more employees. More than one in two (52 percent) companies increasingly use agile methods, an increase of ten percentage points compared to 2018 (42 percent).

To succeed in a digital world, companies increasingly expect digital skills from their employees. Eight out of ten companies (84 percent) say that employees should have general digital skills in order to drive the digital transformation of the company. This is a significant increase compared to the previous years with 74 percent (2018) and even only 66 percent (2017). Eight out of ten companies (81 percent) state that they help employees develop digital competences. A year ago, the figure was 77 percent, two years ago it was 75 percent.

Every second company (50 percent) states that employees quickly adopt new technologies. However, a similar number (44 percent) also complain that the effort to convince employees to use new technologies is very high. This is one of the reasons, a large majority – two thirds of companies (66 percent) train their employees to use new technologies.

"Our study shows that German corporations are accelerating their digital transformation journeys, increasing the scale and complexity of their initiatives, necessitating robust change management processes, and investments in talent development. Additionally, to gain better speed to value, organizations are embracing agile methods," said Sapthagiri Chapalapalli, Managing Director, TCS Germany. "TCS" domain knowledge across multiple industries, contextual knowledge of our customers' businesses, investments in research and innovation, Location Independent Agile Model, and proven

track record in executing large and complex programs have made us the preferred partner for our customers' growth and transformation initiatives."

For more information and to download the trend study 'Don't Panic! Keep Calm and Digitize', go to: https://studie-digitalisierung.de/en

Methodology: The study is based on telephonic interviews conducted by Bitkom Research on behalf of TCS in June/July 2019, involving 953 senior executives responsible for digitization in their organizations, including managing directors, board members, and decision-makers in the fields of IT, digital technology, and operations. The companies included in the study were those with 100 or more employees and covered all sectors of the German economy. This is the fourth annual study commissioned by TCS.

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PROSTEP Participates in Autonomous Driving Project

05 December 2019

Autonomous driving is of strategic importance for digital transformation of the automotive industry. PROSTEP AG is therefore actively participating in key funding projects for the validation and verification of autonomous driving functions such as V&V and SET Level 4to5, which were recently approved by the German Federal Ministry for Economic Affairs and Energy (BMWi). As the leading, vendor-independent PLM consulting and software company, PROSTEP will provide its partners from industry and the research community with support for the testing and industrialization of project results and will also be developing the demonstrator for a traceability solution.

Autonomous vehicles must be able to master all critical driving situations in order to obtain approval. Testing their behavior on the road alone would be far too risky and time-consuming. Therefore, the driving functions must be validated digitally. That is why major carmakers and automotive suppliers such as Audi, BMW, Continental, Ford, MAN, Opel, Robert Bosch, VW and ZF Friedrichshafen are developing uniform methods and tool chains for the digital validation of highly automated (Level 4) and autonomous (Level 5) vehicles in urban environments together with leading German research institutes and software companies within the framework of the funding projects V&V and SET Level4to5.

PROSTEP will be playing a key role in both projects, which have a total volume of 77 million euros. As an intermediary between the research community and industry, the company will assume the task of ensuring the industrial applicability of the project results and promoting their industrial implementation. Specifically, the company will provide the project partners with support for industrial testing, requirements definition and feedback of the test results into the respective subprojects. The project team headed up by Dr. Steven Vettermann will also contribute its comprehensive process and integration know-how to the design of the data models and simulation environments.

In addition, PROSTEP will be developing the demonstrator for a traceability solution on the basis of its open, standards-based software tools within the framework of the project. Among other things, the demonstrator will make it possible to verify when which simulation models led to which results and decisions, using which software and hardware configuration, and subject to which constraints and requirements. The reason behind the demonstrator is the fact that there is currently no neutral system available on the market for this "baselining" of simulations in a heterogeneous IT landscape. Once the project has been completed, PROSTEP will develop the demonstrator into a commercial product and market it under the name OpenCLM. The knowledge gained in the projects will also be incorporated in consulting projects with customers.

"We see autonomous driving as a key future technology and a promising market for our wide range of consulting and solution offerings, and one that we will be expanding into a strategic business segment", says Dr. Bernd Pätzold, CEO of PROSPTEP AG. "In recent months, we have rigorously expanded our know-how in the areas model-based systems engineering (MBSE) and electrical/electronic (E/E) and software development to ensure that we are able to tackle the new topics in a professional manner, among other things by acquiring a majority shareholding in the consulting firm Bartscher & Hasenäcker Consulting, which specializes in PLM for E/E."

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Stratasys Adds TCL Hofmann & TCL Hunt to Channel Network Expanding 3D Printing Solutions Outreach in Machinery and Technical Sectors

03 December 2019

Stratasys AP, a subsidiary of Stratasys Ltd. announced the appointment of TCL Hofmann and TCL Hunt as authorized channel partner to expand its market outreach in both Australia and New Zealand.

"3D printing has changed the ways that many things are created and as an innovator and partner of our customers, Stratasys continues to push the boundaries to ensure needs are matched with the most fitted solution, whether our customer requires 3D printed replica of a patient's heart for pre-surgical analysis, or a customized masking jig in shop floor," said Ben Darling, Senior Territory Manager of Stratasys Australia and New Zealand Region.

TCL Hofmann and TCL Hunt joins the Stratasys' reseller network with strong understanding of the local manufacturing market and customer needs in technical products. The team will market the complete suite of Stratasys' professional additive manufacturing solutions, including 3D printers, wide range of engineering-grade materials, post-sale service and 3D printing software across multiple sectors within the manufacturing as well as businesses that are looking for transformation into industry 4.0 or smart manufacturing.

"For many years we have seen 3D printing technology bringing an unprecedented revolution to many multinational enterprises, be it on screen or behind the scene. The application potentials that professional-grade 3D printers can bring to Australian and New Zealand companies is huge and this is a very great moment to join the force," commented Joseph Hancock, Managing Director, TCL Hofmann.

"We look forward to connecting Stratasys' long standing expertise in industrial-grade 3D printing systems to TCL's customers, ensuring that they find the best tools and solutions that will allow them to upscale their businesses."

Stratasys and channel partners will continue to offer world-class 3D printing solutions and vertical applications to companies across different sectors, including aerospace, automotive, education, medical, consumer goods and electronics, facilitating businesses to expedite their design and manufacturing processes.

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TCS Recognized with Top CSR Honor, the U.S. Chamber of Commerce Foundation Citizens Award 02 December 2019

Tata Consultancy Services won the U.S. Chamber of Commerce Foundation's 2019 Citizens Award in the category of Best Commitment to Education Program for its Ignite My Future in School

(IMFIS) program.

The Annual Citizens Awards program recognizes the most innovative and impactful corporate citizenship initiatives, from disaster relief to economic empowerment, health and wellness to education, and corporate stewardship through business with purpose. For 20 years, it has illustrated how businesses lead the charge in creating innovative solutions to some of the world's most pressing challenges.

"We are honored to be recognized for the transformative impact that our Ignite My Future in School program has had on U.S. education," said Balaji Ganapathy, Head, Workforce Effectiveness, TCS. "We are dedicated to building on the program's success to provide every educator, student and school system access to the transdisciplinary resources that drive computational thinking – the foundational skill for 21st century careers."

The IMFIS program, offered free of charge, democratizes the adoption of computational thinking among educators and students through a transdisciplinary teaching approach that integrates the foundational skill into core subjects like math, science, art, and social studies. Designed to empower U.S. educators, the program provides best-in-class professional development, first-of-its-kind computational thinking resources that are aligned to national standards and frameworks, an interactive digital platform, a community of teacher leaders, and year-round engagement. TCS utilizes its 50-year industry experience and human capital to add relevance and context, while IMFIS partner, Discovery Education, brings its training and education expertise, together equipping educators and students for the future.

Since its launch in 2017, the program has reached more than 10,000 teachers across 91 school districts and almost 600,000 students, of which over 70 percent are enrolled in the free and reduced lunch program. TCS' vision is for IMFIS to impact 20,000 teachers and one million students by 2021.

"Every day, businesses, such as TCS, serve as a powerful force for good in communities across the U.S. and in countries around the world. They solve today's greatest challenges through innovation, expertise, efficiency, capital, and collaboration," said Marc Decourcey, Senior Vice President, U.S. Chamber Foundation. "For the past two decades, the U.S. Chamber of Commerce Foundation Citizens Award has recognized businesses that are leading the charge in making the world a better place and we are honored to award TCS and its Ignite My Future in School with one of the most prestigious honors in corporate citizenship."

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Events

Aras to Host Automotive Industry Leaders at Holiday PLM ReInvented MeetUp and Open House 05 December 2019

Aras announced it will host industry leaders at its Holiday MeetUp & Ribbon Cutting Open House on December 9th, 2019 in Troy, Michigan.

During this holiday event, Aras will provide attendees the opportunity to network with leaders in the automotive industry from companies including General Motors, DENSO International America, Inc. (DIAM), Magna, and Lear and discuss the challenges they all face in managing the product lifecycle in an increasingly connected world.

This event also marks the grand opening of Aras' new 16,000 sq. foot Troy office—a sign of Aras' continued investment in the Detroit area and commitment to providing software solutions to the automotive industry for the engineering, manufacturing, and maintenance of complex products.

Attendees will be part of a special ribbon-cutting ceremony with the Troy mayor and other city and county representatives, hosted by Aras CEO, Peter Schroer.

Event Details

Date: December 9th, 2019 Time: 4:00PM-7:30PM

Location: 2600 West Big Beaver Rd, Suite 150, Troy, MI

Register: https://mkt.aras.com/meetup

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Falkonry and Siemens to Showcase Their New Combined Predictive Operations Capabilities at the 34th International Maintenance Conference (IMC 2019)

05 December 2019

Falkonry, Inc. announced that Falkonry and Siemens will be showcasing their new combined predictive maintenance capabilities for industrial operations at next week's IMC 2019 in Marco Island, Florida. In the Siemens booth, the companies will be featuring a joint demo that illustrates how maintenance and process engineers can automatically discover patterns in time series data and reduce maintenance cost by predicting operational events. In addition, Falkonry will be demonstrating its Edge Analyzer for deploying predictive analytic models at the edge for real-time predictions from live streaming data.

Details:

Date: December 9-12, 2019

Event: The 34th International Maintenance Conference (IMC 2019) Venue: JW Marriott Marco Island Beach Resort in Marco Island, FL

Booth #: Siemens Booth #200

About the Demonstrations

The joint Siemens-Falkonry demo will showcase the integration of Siemens XHQ operational intelligence software with the Falkonry LRS machine learning system. As part of Siemens Digital Industries, the XHQ software is an enterprise operational intelligence software that provides a consistent, coherent means to analyze and view all critical business and operational data from disparate sources. Siemens XHQ customers can benefit from native integration with Falkonry LRS to deploy predictive analytics and connect to any historian or enterprise asset management systems.

Falkonry will also be demonstrating the Falkonry Edge Analyzer at the show. Edge Analyzers enable predictive analytics models to be deployed at the edge, with minimal resource requirements, in remote or mobile environments.

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Financial News

Synopsys Posts Financial Results for Fourth Quarter and Fiscal Year 2019

05 December 2019

Q4 2019 Financial Highlights

- Revenue: \$851.1 million

- GAAP earnings per share: \$1.04

- Non-GAAP earnings per share: \$1.15

FY 2019 Financial Highlights

- Revenue: \$3.361 billion

- GAAP earnings per share: \$3.45

- Non-GAAP earnings per share: \$4.56

- Cash flow from operations: \$800.5 million

- Cash and cash equivalents: \$728.6 million

Synopsys, Inc. today reported results for its fourth quarter and fiscal year 2019. Revenue for the fourth quarter was \$851.1 million, compared to \$795.1 million for the fourth quarter of fiscal 2018. Revenue for fiscal year 2019 was \$3.361 billion, an increase of 7.7 percent from \$3.121 billion in fiscal year 2018.

"Fiscal 2019 was another outstanding year for Synopsys. Even as we navigated several external challenges, we significantly exceeded our beginning-of-year plan, and delivered strong growth in revenue, non-GAAP operating margin, earnings-per-share, and cash flow, and across both operating segments. We also returned \$329 million to shareholders via stock repurchases," said Aart de Geus, chairman and co-CEO of Synopsys. "Against a challenging global market backdrop, design activity remains strong. Our unrelenting innovation push has resulted in stronger-than-ever platforms, which are driving notable benchmark wins and increased competitive displacements. As we move into 2020, well on our way to our next milestone of \$4 billion in revenue and beyond, we are targeting solid revenue growth, continued non-GAAP operating margin expansion, mid-teens non-GAAP earnings per share growth, and strong cash flow."

GAAP Results

On a generally accepted accounting principles (GAAP) basis, net income for the fourth quarter of fiscal 2019 was \$160.7 million, or \$1.04 per share, compared to \$254.3 million, or \$1.66 per share, for the fourth quarter of fiscal 2018. GAAP net income for fiscal year 2019 was \$532.4 million, or \$3.45 per share, compared to \$432.5 million, or \$2.82 per share, for fiscal year 2018.

Non-GAAP Results

On a non-GAAP basis, net income for the fourth quarter of fiscal 2019 was \$177.1 million, or \$1.15 per share, compared to non-GAAP net income of \$119.6 million, or \$0.78 per share, for the fourth quarter of fiscal 2018. Non-GAAP net income for fiscal year 2019 was \$702.5 million, or \$4.56 per share, compared to non-GAAP net income of \$599.7 million, or \$3.91 per share, for fiscal year 2018.

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Implementation Investments

Accenture Assists Navantia in Design, Development and Implementation of Advanced Technologies

to Improve Shipbuilding

06 December 2019

Accenture has been selected to assist Navantia, Spain's largest builder of military and civilian vessels, with the design, development and implementation of "Shipyard 4.0," a new technology platform that leverages digital technologies to improve the efficiency and effectiveness of ship design and construction.

The platform will employ capabilities such as digital twins, modelling and simulation, and artificial intelligence (AI) to help Navantia accelerate ship design and development, optimize the construction process, including meeting maximum safety standards, and develop new services across the operational lifetime of its vessels.

The first ship to benefit from using the Shipyard 4.0 platform will be the new F-110 frigate, part of a new class of combat vessels for the Spanish Navy. The new platform will help Navantia improve its business management systems throughout a vessel's entire lifecycle. The rest of Navantia's new projects will follow.

Accenture will also work with Navantia over the next three years with the integration of Navantia's end-to-end business processes, facilitating the interaction with customers and suppliers. The project will involve more than 1,000 engineers, 40 construction and engineering firms, 200 suppliers, four shipyards and all of Navantia's business lines: Shipbuilding, Systems, Repairs, Propulsion, Life Cycle Support, Wind, and Technology Transfer Program.

"Navantia is focused on improving operational efficiencies by developing digital twins of our key products and digitally connecting the entire value chain," said Donato Martínez, Navantia's chief technology officer. "By partnering with Accenture, a recognized leader in digital solutions, we can deploy our strategic plan with new technologies and products and provide higher value to our customers for decades to come."

Julio Juan Prieto, a managing director in Accenture's Aerospace & Defense practice, said, "Navantia is redefining end-to-end processes and services for Spain's naval forces. The Shipyard 4.0 platform will improve process efficiency, reduce time-to-market, maximize safety, and open the doors to a new wave of advanced products and process-simulation capabilities."

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Altair Accelerator Powers Design for High-Speed Data Delivery and Leads to Cost Savings for Inphi Corporation

04 December 2019

Altair has enabled Santa Clara, Calif.-based Inphi Corporation (NYSE: IPHI), a leader in high-speed data movement interconnects, to realize significant cost savings and speed up design using Altair AcceleratorTM.

The advent of modern internet applications such cloud, big data, streaming video, artificial intelligence,

Internet of Things and more, has made demand for high-performance microelectronics more pressing. As a result, hyper-efficient workflow management and performance optimization tools are essential to compete. Inphi selected Altair Accelerator from among the competition for its superior performance and Altair's reputation for excellent customer service.

"The performance optimization benefits provided by Altair are significant in the semiconductor space, specifically regarding license utilization and scheduling speed," said Weikei Sun, associate vice president, engineering at Inphi. "Altair Accelerator's scheduling speed is ten times that of the competitive solutions we have evaluated. Performant license-based scheduling enables our designers and engineers to explore more designs, faster, so we maintain an agile team and optimize utilization of expensive Electronic Design Automation (EDA) licenses."

Altair Accelerator is a high-throughput, high-efficiency job scheduler designed to meet the complex demands of the semiconductor industry. The high-performance computing (HPC) requirements of EDA tools make Altair Accelerator an excellent solution to achieve performance while optimizing customers' EDA license and hardware expenditures. It's a highly adaptable solution capable of managing compute infrastructures from small, dedicated server farms to complex, distributed HPC and cluster environments.

"Inphi has a history of being first-to-market with new high-speed data movement interconnects technology," said Mahalingam Srikanth, chief technology officer at Altair. "Altair is proud that our HPC technology remains an integral part of Inphi's toolset as they lead from ahead in this highly competitive industry with faster time to market."

Learn more about speeding up semiconductor and EDA workloads with Altair Accelerator at https://www.altair.com/accelerator/.

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B. Braun selects TECHNIA and Dassault 3DEXPERIENCE platform

04 December 2019

TECHNIA announced that they have entered into a strategic partnership with B. Braun - an international leader in medical products, systems and services to the global healthcare market.

This partnership will leverage digital applications and practices to enable B. Braun to improve their product offering, efficiency, quality and collaboration in their supply chain while securing regulatory compliance.

Under the business agreement, TECHNIA will deliver a Product Lifecycle Management solution to more than 13,000 users at B. Braun, enabling digital continuity between PLM, ERP and CRM. The PLM solution uses Dassault Systèmes' industry solution experience "License to Cure" based on the 3DEXPERIENCE platform. The "License to Cure" industry solution experience is augmented by TECHNIA's software and delivered by our world leading Life Sciences consulting team.

"It's an honour to be selected by B. Braun to be their global PLM partner. B. Braun is a true leader in the healthcare business and our partnership will enable them to increase their efficiency, innovation and compliance to existing and new regulations worldwide. TECHNIA and Dassault Systèmes' Life Sciences team will work in close co-operation together with the B. Braun team to secure fast business benefits for B. Braun based on the 3DEXPERIENCE platform." says Jonas Gejer, CEO TECHNIA

"We are facing major challenges due to increasing regulatory requirements and market demands. We believe that PLM will be the enabler to overcome these hurdles. We selected Dassault Systèmes' 3DEXPERIENCE platform and TECHNIA to leverage their Life Sciences knowledge with a strategic partnership for our broad product portfolio. We're happy to embark together on this digital journey." says Gerd Niehage, CIO B. Braun.

"The 3DEXPERIENCE platform and our 'License to Cure' industry solution experience are tailor-made to help companies eliminate scattered processes and data and embed regulations as an asset, optimising quality and compliance," says Claire Biot, Vice President, Life Sciences Industry, Dassault Systèmes. "It is all about bringing innovative medical devices faster to patients and physicians while reducing cost. TECHNIA is one of our largest Life Sciences system integrators worldwide and we will work closely together to deliver business transformation to B. Braun."

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Ceramica Group Embraces Digital Transformation with Infor

02 December 2019

Infor announced that leading Italian tile manufacturer IRIS Ceramica Group has selected an Infor enterprise software suite based around Infor M3 as part of a digital transformation designed to boost productivity, performance and service to customers. The suite incorporates enterprise resource planning (ERP), product lifecycle management (PLM) specific for the fashion industry, enterprise asset management (EAM) and analytics capabilities (Birst). The Infor platform will help to expedite product development from design through production, facilitating increased innovation at the design- and quality-focused tile company. The enhanced reporting tools will facilitate full data integration and real-time analytics from across all departments, plants and subsidiaries.

IRIS Ceramica Group selected Infor based on its partnership approach and industry vertical expertise, as well as the scalability and industry-specific capabilities of the platform. As part of IRIS' digital transformation strategy, the solution will accelerate processes, allow the organisation to get closer to customers and lead the way in demonstrating best practices across the tile sector as a whole.

"As an industrial design company, we pride ourselves on our innovative product development, state-of-the-art industrial equipment and vision," comments Francesco Verde, group CIO of IRIS Ceramica Group. "Infor's dedicated innovation platform aligns well with our values and processes, and will allow us to take the next step in our journey, while the advanced analytics will allow us to simplify access to company-wide data through dashboards and tailored reports. Through providing intuitive tools to boost productivity and enhance decision-making, we plan to create an environment that prioritises both innovation and customer satisfaction. Infor represents the backbone of this vision."

"Delivering the best possible customer experience is paramount, and with an industrial design sector leader such as IRIS Ceramica Group, product innovation is at the heart of this," comments Laurent Jacquemain, Infor vice president for Southern Europe. "Through harnessing all of its key product and production processes, and ensuring that designs reach production quickly, in line with seasons and collections, the organisation is leading the way in its industry."

Infor- Fransen Gerrits Increases Efficiency and Optimizes Business Processes with Industry-Specific ERP

03 December 2019

Infor announced that Fransen Gerrits, a Dutch animal feed producer, has completed a successful upgrade of Infor M3 to help automate processes and streamline efficiency.

Fransen Gerrits has been using the M3 enterprise resource planning (ERP) solution since 2007. One reason for the longevity is that M3 has continually expanded its capabilities to meet the evolving needs of the food and beverage industry and its customers. By upgrading M3, with the support of Infor Alfa-Beta, Fransen Gerrits will benefit from new ways to optimize business processes and increase efficiency.

Joris Teuwen, financial director at Fransen Gerrits, elaborates on the company's commitment to Infor: "I keep up-to-date with suppliers like SAP and Microsoft to see what's available in the market, but Infor M3 is the absolute winner for us thanks to the multi-country, multi-company, intra-company and multi-currency capabilities it provides, which I have not yet seen in other solutions. This is very important to us because we often deal with inter-company cashflows. In addition, the way the database is structured is better and makes it easy to facilitate any expansion abroad."

Teuwen continues: "What also appeals to us is the importance of M3 within the Infor portfolio, the belief in the product, all the R&D efforts being made and the innovative and progressive nature of the company. During the Inforum event in New York, we got a good feel for the company, and we can see the commitment the company has made to M3. Our strategy is based on choosing best of breed and outsourcing main components. Therefore, we fully trust Infor Alfa-Beta for the complete management and maintenance of Infor M3. And, it works great. The sustainability of the solution is guaranteed, and everyone is able to do what they do best and their focus is on that."

Infor M3 is the control center for Fransen Gerrits — recording the purchasing, production, sales and financial process — and surrounded by several third-party applications that either help save costs and/or improve productivity.

"Infor M3 solution is well-suited to the needs of companies like Fransen Gerrits," says Frank Resink, Infor SVP of EMEA Services. "Our strategy is to constantly develop in vertical industry sectors, demonstrating Infor's capacity to meet specific needs and to adapt to the requirements of the sector and the customer, be it an on-site or a cloud deployment. One of the major factors that led Fransen Gerrits to select Infor was the multi-company capabilities. Additionally, Infor M3 is built with an open application programming interface (API), which delivers an infrastructure that is able to connect disparate components, allowing them to work together without customizations."

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Japanese Food Giant Watami Deploys Infor Cloud ERP for Business Standardization and Decisionmaking

06 December 2019

Infor announced that Watami Co. Ltd. has gone live with Infor CloudSuite Food & Beverage (F&B) — a multi-tenant1 cloud ERP solution purpose-built for the F&B industry — as its supply chain management (SCM) platform for its sites across Japan. At the same time, Watami will implement data-driven management with Infor Birst cloud-based business intelligence (BI) platform linked to the Infor CloudSuite solution.

The Watami Group of companies, with Watami at its head, is an integrated food business operating

multiple restaurants and meal delivery services. The group is currently working on "Merchandise Reform," a set of transformations to enable better earning structures and data-driven management decisions in real time via an optimized SCM platform. The aim is to implement a renewable energy-based program in support of what is known in Japan as the "sixth industrialization model."2

Watami selected Infor CloudSuite F&B for its ability to drive business standardization through industry-specific functions and to build a platform for data analysis. In October 2019, Watami went live at three of its domestic sites with a cloud-based SCM system based on Infor CloudSuite F&B. By February 2020, it will roll out the system to all 11 of its food processing plants across Japan that service its restaurant and meal delivery businesses.

Adoption of Infor CloudSuite F&B has enabled Watami to unify item numbers across the entire company, where previously a single item had multiple codes, and to define multi-level recipes depending on the process, where previously they were single level. This has helped standardize business processes and data definitions in production management. As a result, it has built the foundations of data-driven management to enable advanced cost calculations and production planning.

Watami also adopted Infor Birst to visualize production management data that has been standardized when adopting the multi-tenant cloud ERP solution. Infor Birst links data residing in Infor CloudSuite F&B as well as external data across the whole organization and sites, and builds dashboards that automatically collect the required data for the business.

With standardized business processes and data definitions, Watami uses Infor Birst to manage costs across its manufacturing sites and manage food loss associated with sales performance. It achieves real-time insights in line with its business mission by documenting decision-making criteria and subsequent actions as "user story" scenarios to help eliminate cognitive bias that could corrupt the decision-making process, and by building BI dashboards with drill-across3capabilities using Birst optimized to each member of the management team. By the end of the year, it will also start making data-driven management decisions in real time using data stored by the Infor CloudSuite F&B solution.

With Infor CloudSuite F&B being a multi-tenant cloud ERP solution, Watami plans to leverage its high extensibility to expand into accounts management, add store management, performance management and other functionalities, and extend the solution to overseas sites. It will also continue to drive business standardization and visualization through business data integration as it develops the business foundations to achieve its Merchandise Reform.

Shigeru Wakabayashi, general manager of Watami Co.'s Business Administration/IT Strategy Department, says, "We are grateful to members of Infor, including those overseas, for their support in helping us adopt the Infor CloudSuite F&B package and best practice templates, and in achieving SCM reform and technical innovation. Going forward, we will fully implement the Infor Birst cloud-based BI and business analytics platform and expand this solution into a global integrated ERP platform incorporating finance and accounting functionalities. Using data-driven processes, we will also further improve the management of our renewable energy-based 'recycling sixth-order industry model,' including three nonprofit foundations that we assist, and drive further digital transformation on our frontline."

Infor's multi-tenant cloud ERP solution is always up to date with the functionalities required by global businesses in each industry. In addition to traditional cloud ERP functions, such as orchestration and disaster recovery, 10 to 20 new functions are updated every month. Always being up to date means customers are relieved from the time-consuming task of conventional updates, an expansion of business scope can be achieved without having to align software versions, and new functions can be added

seamlessly.

Sixth industrialization model is a management model to vertically integrate Watami's operations through the primary industries of livestock, dairy, and organic farming; the secondary industries of manufacturing and processing; and the tertiary industries of distribution and retailing.

Whereas "drill down" refers to vertical analysis (for example, drilling down from corporate sales to individual business sales to individual store sales to individual products sales), "drill across" refers to a method of horizontal analysis for determining causal relationships (for example, using individual store sales to find the relationships between sales or customer spend and customer satisfaction).

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MAC Finds Right Fit in Centric Fashion PLM

02 December 2019

MAC, the German trousers specialist, has selected Centric Software's Product Lifecycle Management (PLM) solution. Centric Software provides the most innovative enterprise solutions to fashion, retail, footwear, outdoor, luxury, consumer goods and home décor companies to achieve strategic and operational digital transformation goals.

Founded in 1973 Wald/Rossbach near Regensburg, Germany, MAC's aim is to offer the perfect pair of trousers that are on-trend, high-quality and good value. MAC is one of Europe's largest manufacturers of both men's and women's trousers, selling more than 6 million pairs of trousers every year.

MAC decided to implement a PLM solution to make product development processes faster and more secure in the face of increasing business complexity.

"Our goal is to migrate from Excel-driven product development to a database-oriented approach with a single source of truth at our fingertips," says Eveline Schoenleber, Managing Director at MAC. "We want to establish a product development workflow for the complete process, including the planning, execution and quality management of our trousers collections."

After an in-depth selection process, Centric's market-driven strategy and the team's flexibility were deciding factors in MAC's decision to move forward with Centric Fashion PLM; the solution most closely fit their requirements and goals.

"Centric is a modern, easy-to-use system with an innovative range of modules to cover the complete end-to-end process," explains Eveline Schoenleber. "Their coaching approach to project implementation methodology is another important differentiator for us."

MAC expects to build a digital foundation with Centric Fashion PLM that will drive improvements across every part of the organization, says Eveline Schoenleber.

"We expect to increase the transparency and flexibility of our product development process and Centric Fashion PLM will serve as the key basis for our quality department to ensure the highest quality standard of MAC products. Centric Fashion PLM will also be the foundation for future digitalization projects."

"After a rigorous selection process, we are very confident in Centric's approach and know that their PLM solution is the right fit for us," concludes Eveline Schoenleber.

"We would like to welcome MAC, our latest fashion customer in Europe," says Chris Groves, President and CEO of Centric Software. "We're looking forward to working closely with MAC to ensure they achieve their PLM digital transformation goals and continue to deliver high-quality apparel with greater

efficiency."

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Organizations Globally Select VMware Cloud on AWS as the Foundation for their Cloud Strategy 06 December 2019

This week at AWS re:Invent 2019, VMware, Inc.is demonstrating how customers around the world are selecting VMware Cloud on AWS to migrate and modernize their applications.

Customers adopting VMware Cloud on AWS include 888 Holdings, AIT Worldwide Logistics, Department of Customer Service NSW, EMPLOYERS, Equinix, Optage, and ZENRIN DataCom, all of which are taking advantage of VMware's consistent cloud infrastructure and operations to reduce the cost, complexity and risk of moving VMware-based applications to the cloud. VMware also announced the company is opening a Beta program for the forthcoming VMware Cloud on AWS Outposts.

VMware Cloud on AWS is a jointly engineered service that brings VMware's enterprise class software-defined data center capabilities to Amazon Web Services (AWS), with optimized access to AWS services. The service offers fast cloud migration, powered by VMware HCX and vMotion combined with consistent hybrid cloud infrastructure and operations. Once applications are migrated, customers can extend the capabilities of applications through integration of native AWS services, such as Amazon Simple Storage Service (Amazon S3), Amazon Relational Database Service (Amazon RDS), and Amazon SageMaker. Customers can run containers and Kubernetes on VMware Cloud on AWS today with VMware PKS, and in the future, leverage Project Pacific, which will transform VMware vSphere into a Kubernetes native platform. Through innovative technology such as Bitfusion and partnerships with industry leaders such as NVIDIA, customers will be able to enrich existing applications and power modern enterprise applications with AI/ML and data analytics workflows through best-in-class GPU acceleration services.

VMware Cloud on AWS Outposts Beta is Open

VMware Cloud on AWS Outposts will bring consistent hyperscale cloud infrastructure and innovative services to the data center in a jointly engineered solution that can eliminate the customer burden of managing on-premises hardware. VMware Cloud on AWS Outposts will be a fully-managed VMware SDDC as a service powered by VMware Cloud Foundation that includes a comprehensive set of software-defined services for compute, storage, networking, security, and cloud management running on AWS Outposts hardware in customers' data centers or co-location facilities. The VMware Cloud on AWS Outposts Beta program(1) is open to a select set of customers in the U.S. region..

VMware Cloud on AWS Customers Share Their Stories

888 Holdings is one of the world's most popular online gaming entertainment and solutions providers. Eran Elbaz, CIO, 888.com, said, "We operate in a highly regulated industry that has stringent data security and disaster recovery requirements. We built out a new on-prem data center based on VMware Cloud Foundation, using NSX for advanced security through micro-segmentation. VMware Cloud on AWS gives us a cost-effective disaster recovery option built on the same consistent cloud infrastructure. With VMware Site Recovery and leveraging AWS Direct Connect, we're able to protect 100's of workloads and 100TBs of data and meet our mandated five minute recovery point objective."

AIT Worldwide Logistics is a global transportation management leader with a flexible business model to deliver tailored supply chain solutions for sea, air and ground freight. Mike Tegtmeyer, VP Global Infrastructure & Security of AIT Worldwide Logistics, said, "We have a long-term strategy to be out of

the data center business, and the first transition we are making is with our disaster recovery environment. With VMware Cloud on AWS managed by Rackspace, we are implementing cloud-based DR as a Service that will enable us to more cost-effectively maintain continuity of operations and reduce the overall risk to our business. We will also be able to establish burstable capacity based on usage, and utilize Rack Connect Global to provide LAN speed connectivity between a geo-adjacent data center and our current on-prem mainframe."

The Department of Customer Service NSW functions as a service provider which supports sustainable government finances, major public works and maintenance programs, government procurement, information and communications technology, corporate and shared services, consumer protection, and land and property administration of the government in New South Wales, Australia. Richard Harvey, senior manager cloud services, Department of Customer Service NSW, said, "Working with VMware business partner, Tracer Cloud, we were able to migrate not only our most critical customer-facing applications to the public cloud, but thanks to the security and compliance of the VMware Cloud on AWS solution, we were also able to move applications that were originally flagged for private cloud. This allowed us to use public cloud solutions such as elastic file storage, and now places us in an excellent position to easily transform applications into other AWS cloud solutions in the future. We needed a knowledgeable partner to support us on this journey because we had an aggressive timeframe. Tracer Cloud designed and delivered our VMware Cloud on AWS solution with Megaport connectivity to provide a flexible, robust, scalable solution that was available in days, not months. Tracer Cloud and VMware were able to build the environment as a proof of concept, which gave us 60 days to prove the concept at a relatively low price before going into a production environment."

EMPLOYERS provides workers' compensation insurance and services for small businesses in low-to-medium hazard industries. Jeff Shaw, executive vice president and CIO, EMPLOYERS, said, "With VMware Cloud on AWS, we've become more agile, efficient and secure. We successfully migrated 350 applications to the cloud in less than one year. In several instances, migrations scheduled to take several days were completed in a matter of hours. We plan to use VMware Cloud on AWS for disaster recovery as a service, which is much more cost-effective and operationally efficient than our previous on-prem, self-managed system. For our DevOps teams and developers, application deployments that used to take six to nine months are now done in only two weeks. This rapid digital transformation, made possible by our move to a cost-effective, high-performance and secure environment in VMware Cloud on AWS has strengthened the relationships between IT and the business."

Equinix is a global interconnection and data center company that connects the world's leading businesses to their customers, employees and partners. Milind Wagle, senior vice president, Chief Information Officer, Equinix, said, "Equinix is using VMware Cloud on AWS to easily and rapidly migrate our on-premises application footprint to the cloud. As a key component in our company's cloud-first infrastructure strategy, Equinix is using VMware Cloud on AWS with AWS Direct Connect to accelerate our digital transformation efforts and provide our enterprise customers with new capabilities faster, improved service uptime and redundancy benefits."

Optage Inc. is an information and telecommunications company providing optical fiber network services to individuals and enterprises, and also operates MVNO and energy services. Kiyoshi Fukui, Systems Infrastructure Team, Platform Equipment Construction Department at Optage, said, "We adopted VMware Cloud on AWS because it combines the unique flexibility of the public cloud with same infrastructure and operational procedures as our on-premises VMware environments. We can now respond to unplanned resource requests from business-facing system administrators. With Stretched Clusters, we're able to maintain business uptime and resiliency, and VMware HCX provides a valuable

tool for moving workloads between our data center and the cloud without any disruption."

ZENRIN DataCom Co., LTD provides map and navigation services by combining search engines and various content data based on Zenrin Group's map assets. Mr. Daisuke Watanabe, Deputy General Manager of Technology Planning Dept. Technical Division at ZENRIN DataCom, said, "AWS is our preferred cloud provider of choice, however, we needed an environment that could support the large investment we had made in our existing VMware environment. Refactoring applications and retraining all our staff in order to move to the cloud would not be cost effective. This made VMware Cloud on AWS the perfect fit for us. We've migrated 700 VMs and will eventually have more than 1500 VMs running in VMware Cloud on AWS. We didn't have to modify our applications, nor change their operation, and using L2 extension and vMotion, we migrated without changing the IP addresses. We are already experiencing higher storage I/O performance, and from a cost perspective, we believe that without VMware Cloud on AWS, our development costs may have been double or triple."

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Pataya Food Group Drives Expansion in Global Markets with Infor

02 December 2019

Infor announced at a customer signing ceremony in Bangkok that Thai seafood manufacturer and distributor Pataya Food Group has chosen to partner with Infor on its digitalization plan. The food giant will leverage Infor CloudSuite Food & Beverage (F&B), Infor OSand Infor Birst across its subsidiary companies and help accelerate business growth and drive Pataya Food Group's expansion into global markets. The solution will be implemented by channel partner Lawson Software.

Pataya Food Group is the leading shelf-stable seafood manufacturer and distributor in Thailand, based on the principle that consistent quality assures success. This commitment to quality has become recognized internationally. Apart from brands such as Nautilus, Sea Crown, Mongkut Talay and Regalos, its original equipment manufacturing (OEM) business has also established itself as supplying best-quality products.

When the project is rolled out, Pataya Food Group will be able to streamline operations in production and distribution, optimising inventory management and supply chains with next-generation intelligent analytics. The company will have the infrastructure to effectively manage product lifecycle from factory to shelf for all brands across multiple regions with a centralized solution. This implementation will also help to standardize and maintain food product compliance in Asia.

"Our vision at Pataya Food Group is to be the top choice for quality food on supermarket shelves across Asia and global markets," said Vichit Anathep, managing director, Pataya Food Industries Limited. "Through our partnership with Infor, we look forward to digitally transforming our business to overcome challenges that are unique to the food and beverage industry — this is where Infor's deep industry expertise lies — and drive our expansion globally."

"In partnering with Infor and implementing Infor CloudSuite F&B, Pataya Food Group is now armed with the tools and technology to more efficiently deliver on quality products it is already known for, and that will help enhance end-to-end operations," said Fabio Tiviti, vice president of Infor ASEAN. "Infor is committed to providing next-generation, industry-specific applications that are finely tuned in the cloud, and we look forward to a fruitful partnership with Pataya Food Group, working together to meet its overall business objectives and increase productivity and customer satisfaction."

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Telma Shortens Path to Market for Frictionless Braking Systems with ANSYS

06 December 2019

Telma, the world leader in frictionless braking systems, significantly shortened time to market and optimized product development costs using ANSYS for three new series of retarders — braking systems that use electromagnetic induction. With ANSYS, Telma decreased the number of prototypes required for validation from 10 to one over the course of a decade — enabling faster development of retarders that reduce fine-particle emissions associated with braking systems by up to 90% while significantly reducing maintenance costs.

Retarders are used in heavy vehicles, mining applications, wind turbines and elevators to dissipate most of the large amounts of energy produced during deceleration. This requires testing and validating the retarders under extreme conditions to ensure the function and safety of the application. With ANSYS, Telma engineers replaced their time-consuming and expensive physical prototyping and testing process with simulation, enabling engineers to better manage the electromagnetical, fluid and structural mechanic phenomena at work. Using ANSYS' high-fidelity multiphysics simulation solutions to model, simulate and validate these virtual prototypes, Telma significantly reduced costs and accelerated time to market.

"With the simulation solutions from ANSYS, we have complete control over all three physics and can validate our models in one iteration," said Nicolas Quennet, director of research and development at Telma. "Our engineers can easily duplicate models to simulate all or part of the products, which also boosts innovation. Furthermore, as a leader in engineering simulation software, ANSYS represents a guarantee of excellence and quality for both existing and prospective customers."

"Telma's products are vital – not only because they help with essential vehicle safety issues — but also because of their positive environmental impact," said Chris Wolfe, lead product manager of systems coupling and data analytics at ANSYS. "Telma's team faces true multiphysics engineering challenges and our multiphysics solutions proved to be a perfect fit for clearing those hurdles. It's rewarding to see our software and consultation having such a positive impact on product development and optimizing resources."

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Product News

Altair Releases Altair EDEM 2020 for Faster Workflows and Faster Results

03 December 2019

Altair has released Altair EDEM 2020, the market leading Discrete Element Method (DEM) software for bulk and granular material simulation.

EDEM is used for virtual testing of equipment that handles or processes bulk materials in the mining, equipment manufacturing and process industries. Companies worldwide use EDEM to optimize

equipment design, increase productivity, reduce operational costs, shorten product development cycles and drive product innovation.

EDEM 2020 from DEM Solutions Ltd., recently acquired by Altair, allows for faster workflows, and includes new tools for quicker and easier simulation set-up. The new release also includes new coupling solutions with multi-body dynamics software Altair MotionSolveTM and open source, computational fluid dynamics (CFD) software OpenFOAM.

"Speed has been an important focus for our development work and successive releases have been concentrated on implementing EDEM capabilities for GPU technology, so all users benefit from significant speed up of their simulations," said Mark Cook, Altair product manager for EDEM. "With EDEM 2020 we are now addressing simulation set-up and introducing advanced capabilities such as Meta-Particles for simulating flexible fibers and Motion Control for advanced geometry movement. Additionally, there are new tools such as sphere fitting which are now standard features in EDEM."

EDEM 2020 highlights include:

New Sphere Fitting Tool

EDEM can simulate any size and shape of material using the computationally efficient and well validated multi-sphere method. In this method, shape is introduced by overlapping multiple spheres and, by increasing the number of overlapping spheres, it allows for increased shape fidelity. With the new Sphere Fitting tool, users no longer must manually arrange spheres to create the shape they want to represent. The tool automatically builds a multi-sphere particle that closely matches an imported particle shape from a CAD file. Users can control the number of spheres used, as well as restrict the minimum sphere size. This tool means users can get the benefit of efficient multi-sphere simulation without the effort of building the particle shape.

Meta Particles Creation

Many industry applications involve material that is flexible or elongated in nature, such as fibers, agricultural crops and grass. Meta Particles, introduced in the EDEM Creator, enables users to easily create groups of particles to create flexible fibers through the use of a Bonded Model that has been updated to support Meta Particles. It is also fully GPU compliant. This significantly reduces the time and effort needed to set up a simulation for flexible particles and enables all users to create such material in a straight-forward manner.

Material Block Dynamic Factory

EDEM has previously introduced a Bed Generation Tool (also known as Material Block) that enables users to generate large beds of material quickly and easily by copying and arranging smaller blocks of material. With EDEM 2020 this capability has been extended to operate as a 'dynamic factory' meaning the same block of material can be automatically introduced in a simulation at regular intervals. This works well where batching occurs naturally, such as screw augers, belted conveyors, balers and more. This capability is a powerful way to enable the output of one simulation to be used as input to another simulation without having to re-run it, saving significant amounts of time.

Motion Control

A motion control capability is now available, enabling users to easily introduce motions to geometries

that occur due to force or torque being applied. Previously only possible via EDEM's coupling interface, this capability to add force and torque is now available directly from the EDEM Creator and can be combined with regular kinematics. This creates a powerful environment to easily define a broad range of geometry movements to match real-life equipment movement.

Increased Performance

On the solver side, EDEM 2020 benefits from further speed improvements. Benchmarks have shown great speed-up when using GPU, as opposed to CPU only, with some standard examples showing a speed-up of up to 15 times when using a high-end GPU card versus 12 CPUs. The GPU solver is compatible with API models and the EDEM coupling interface enables all users to benefit from a speed-up regardless of how complex the simulation. Customers can access the GPU benchmarks from the Customer area (login required).

Post-processing – EDEMpy 0.1.2

EDEMpy is a Python library for post-processing and analyzing EDEM simulation data, making it easy for users to extract specific data from a simulation deck and process that data in a customizable and reusable way. A range of enhancements have been made in the latest version including a new binning feature for searching objects inside a box or cylinder bin, new methods for getting sphere position and radii data and improved performance for getting contacts and bonds data.

New EDEM-MotionSolve coupling

Coupling EDEM with multi-body dynamics (MBD) software enable engineers designing heavy equipment to introduce realistic bulk material in their MBD simulations and to get key insight into machine-material interaction. EDEM can now be coupled to Altair MotionSolve in addition to the range of solutions already available with other MBD software.

Enhancements to the EDEM-Fluent coupling

EDEM-Fluent coupling, enabling users to accurately simulate a variety of particle-fluid systems, has been updated and now allows users to transfer chemical-species data. This makes it possible to simulate complex thermal and chemical reactions such as evaporation, and in a subsequent update, it will also enable combustion. This opens the door to a whole new range of applications that rely on processes dependent upon the modelling of these phenomena. For more information about simulating evaporation read this blog post from A. Hobbs at Astec, Inc.

New EDEM-OpenFOAM coupling

Users wanting to perform coupled DEM-CFD simulations now have the choice to couple EDEM with Fluent or the open source software, OpenFOAM. The EDEM-OpenFOAM coupling overcomes one of the common limitations with DEM-CFD coupled simulations, namely that particles must be smaller in volume than the mesh cells they occupy. This allows engineers to simulate a wide range of application types previously not possible.

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Altium Launches ALTIUM DESIGNER 20

03 December 2019

Altium launched the next evolution of easy, modern and powerful PCB design software: Altium Designer 20. Spanning more than two decades of electronic design innovation, Altium Designer 20 improves the design experience with a faster schematic editor, high-speed design and enhanced interactive router capabilities enabling faster board design.

"Most of my design time is spent on routing. The new routing capability in AD20 will save me at least 40% of design time," said Mark Ross, an Electronics Designer at Progressive Dynamics, Inc. "If I was not already an Altium Designer user, I'd switch just for the new routing capability."

New and advanced capabilities include:

Best in class interactive routing - new "push & shove" capabilities enable routing of complex HDI boards and speed-up design times by over 20%, even for simple printed circuit boards.

New high-speed PCB routing capabilities - new advanced routing enables users to efficiently design high density and high-speed boards using modern SerDes like PCIe 4.0/5.0, USB3.2, 100G Ethernet and parallel buses like DDR3/4/5.

Industry-leading multi-board design - the latest release leverages ActiveBOMTM capabilities, including supplier search, BOM rule checking, and live part choices, for multi-board assemblies. Users can also export 3D PDF files of the multi-board assembly allowing collaborators to view and manipulate 3D assemblies.

New high-voltage design capabilities - for applications where high-voltage design is critical (e.g. spacecraft, high-altitude aircraft, and high-tech lasers), AD20 provides new creepage rules that help maintain high-voltage clearances across the PCB surfaces for prevention of electrical arcing hazards for power supply and mixed-signal device designs.

Enhanced user experience - user productivity is dramatically improved with new dynamic compilation capability, providing quick access to data across schematic, layout, BOM generation, design documentation, and other elements of Altium Designer's unified design environment.

User-driven quality improvements - AD20 boasts over 200 enhancements suggested by Altium Designer users.

"Altium Designer 20 is a game changer for PCB designers," said Sergey Kostinsky, CTO of Altium. "The advanced capabilities in this release make it possible to more efficiently design any board, from simple to complex."

Altium Designer 20 is available now. For the latest product information and how to order visit https://www.altium.com/altium-designer/whats-new.

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AVEVA - Value Chain Optimization Solutions Enhance Enterprise Collaboration and Agility 04 December 2019

AVEVA announced enhancements to its Value Chain Optimization offering to enable customers to eliminate information silos and integrate critical business processes across the operational value chain.

AVEVA's Value Chain Optimization solution, in recent news, brings together software from across its portfolio that help operators and manufacturers manage their supply chain, operations and process optimization across key industries including Refining, Petrochemicals, Metals, Mining and Materials, Food and Beverage, Consumer Packaged Goods (CPG), Water and Wastewater. It also helps operators

drive efficiency, make better and faster decisions, reduce cost and create new opportunities across the operations value chain.

"Companies are dealing with a legacy of disconnected processes and working to bridge them to create end-to-end visibility is the foundation for operational digital transformation," said Harpreet Gulati, Head of Planning and Operations, AVEVA. "Value Chain Optimization presents a unique opportunity to orchestrate all business and operations activities across the supply chain from feedstock acquisition, planning, scheduling, operations and distribution. AVEVA's Value Chain Optimization solutions have enabled organizations globally to transform their operations, by improving refining margins by up to \$0.70/barrel, improving mining asset utilization by 20%, reducing water use by 30%, and improving productivity by 20% in food processing."

Industrial operations have grown over the last 20 years with poor integration from a legacy of point solutions involving manual data transfer or custom software which has resulted in operational silos across the value chain. AVEVA's strategy helps organizations address these challenges and create a collaborative environment instead of business or process silos. In this way the operations lifecycle can be managed in a comprehensive, flexible and connected manner that brings transparency to the decision-making process across the value chain.

AVEVA's Value Chain Optimization is already successfully deployed by several multinational companies globally:

Abu Dhabi National Oil Company (ADNOC) recently reported benefits of \$60-100M USD from integrated production planning

BP Plc has cut crude purchase decision time from two days to less than two hours

New Belgium Brewing has decreased downtime by more than 50% and increased the efficiency of scheduled run time 25% - 30%

Roy Hill worked closely with AVEVA to develop a greenfield iron ore mining site, connecting the entire value chain with industry leading efficiency from pit to port

"Market volatility, demand fluctuations and competitive pressure is driving industrial operators to become more global and vertically integrated as they seek ways to continue to create efficiency, take cost out or identify new opportunities to drive organizational profitability," commented Gulati "AVEVA's Value Chain Optimization solutions, combine Cloud technology and Digital Twin innovations with analytics to help operators break down silos and foster better collaboration, enabling our customers to realize the benefit that comes with unlocking their value chain."

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Hexagon-Latest NCSIMUL Features Three Areas of Enhancement

03 December 2019

Continuing the ethos of powering a successful digital ecosystem which is smart and fully connected, Hexagon have just released the latest NCSIMUL CAM simulation package from their Production

Software portfolio.

It includes a number of important enhancements to both high-end machining verification, and the module which automatically converts CAM and NC programs to different machines. The three main topics which developers have focused on in this latest release are:

Optipower

Interface enhancements

4CAM.

Helping manufacturers bring their factories in line with the Industry 4.0 philosophy of smart production, NCSIMUL 2020.1 introduces an additional parameter to NCSIMUL Machine. Optipower complements the Optitool module by adding the necessary power and torque to remove material.

Technical Director Philippe Legoupi says it is used as a limitative parameter, which optimises the program and limits the power, so that risks of breakage are avoided. "It takes into account the type of material, the chosen tool, and the definition of its angles." A graph shows the evolution of the power on the tool, so it can be limited to avoid possible flexions, overheating and premature deterioration.

The interface has been enhanced with two main developments which he says are particularly valuable for optimising programs. "The aim is to save time through automated tools, and giving a better and clearer view of work through enhanced navigation."

Firstly, a "Graph Window" has been added, enabling users to zoom in to focus on a specific tool, rather than being restricted to a simple overview. "The choices are saved in the project window – so even if you need to watch another part of the program, the focus created on the chosen tool will be saved in the project. Also, the colour of the focused graph matches the colour of the toolpaths on the 3D view, which is helpful in giving a clear vision of the machining process at a glance."

And secondly, there is now the option of choosing a specific sequence in the arborescence. "By applying the F7 key, users can now reach the chosen place in the program, in the window they need. And the milling sequence window is linked to the project tree, so it's possible to navigate freely from one to the other. This is especially useful in switching quickly and simply from the program's 3D view to the navigation tree, and vice versa."

The 4CAM part of the digital twin solution benefits from five significant enhancements:

Supports native polar toolpaths for mill-turn machines

A new link for twin head machines, and a change of rotation for safer positioning

General Improvements:

Axis system duplication

More realistic rendering without slowing the process.

Overall, the NCSIMUL package builds an optimised virtual twin of the real-life machining environment to eliminate errors, secure production, decrease set-up times, reduce manufacturing costs, and increase shop floor productivity.

Hexagon releases QUINDOS 2020.1

02 December 2019

Hexagon's Manufacturing Intelligence division has announced the main release version QUINDOS 2020.1 of the most powerful metrology software for special geometries and the most flexible solution for measuring tasks ranging from standard inspection to complex powertrain applications. In this latest release, QUINDOS breaks new ground in program creation by integrating a number of innovative features.

The new option Inspection Planning with PMIs (Product Manufacturing Information) enables QUINDOS to automate part program creation by importing GD&T information and dimensions from native 3D CAD models. QUINDOS interprets the metrology-relevant information from the 3D data and automatically associates the resulting features with the measurement and evaluation methods. Predefined tool/sensor configurations are automatically assigned to the characteristics.

An intuitive editor allows the operator to adjust the measurement scope, sequence, and strategy as required. Missing dimensions can be added using an interactive tool which can also be applied to standardised CAD models. Information on the technical drawing can thus be integrated as PMIs in the IGES or STEP model and used as a basis for the automated part program or procedure creation in the new option.

QUINDOS 2020.1 introduces a new smarter interface, which utilises geometry and context-specific intelligent menus to guide the user through the programming task. New intuitive measurement commands further enhance the usability of the software and the customer's user experience. Improved algorithms deliver a simpler workflow – pre-defined probing strategies and specialised approaches are a thing of the past.

"Our trademark is flexibility. QUINDOS is the Swiss Army knife of measurement technology," says Karin Schneider, Product Manager for QUINDOS. "Thanks to the software's latest innovations, inspection planning is smarter and customers can complete measurement even more efficiently."

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iBaset announces Fast Value Program

05 December 2019

iBASEt launched an innovative program that streamlines how software solutions for complex discrete manufacturing can be deployed quickly to enable a much faster time-to-value. The program provides iBASEt customers software licenses, implementation services, training, and first year maintenance with realized business value within 90 days of initiation.

iBASEt's Fast Value program is most recently proven with business value delivered in 90 days to a Defense Electronics and Satellite Components Manufacturer. Due to this manufacturer serving markets that require advanced technology and high reliability products, their need to achieve the highest level of compliance and efficient operations is paramount. Despite this complex environment, iBASEt's Fast Value program helped simplify the implementation of a solution that provides complete track and trace containment as part of their compliance-led track and traceability program.

Despite the high business value of implementing software solutions in complex manufacturing, manufacturers continue to struggle with identifying specific benefits to justify these investments. Deployments often stall due to a lack of executive commitment, integration challenges, or confusion over how best to manage the project.

The iBASEt Fast Value program overcomes these challenges by prioritizing and delivering a set of preconfigured capabilities, such as incorporating engineering changes, identifying quality trends, or eliminating paper-based work instructions. These pre-defined program attributes help to deliver solutions that address complex manufacturing issues once deployed – typically in 90 days – virtually eliminating the risk of project delay for an accelerated time-to-value.

Offered for a fixed price that includes software licenses, implementation services, and first year maintenance, the Fast Value program has transformed how manufacturing software project ROI will now be evaluated.

"Implementing a full MES system lays a foundation for customer-facing (and compliance-based) benefits, including electronic product lot and/or serial genealogy, and multisite orchestration of manufacturing processes. This can also be used to improve agility and speed in vertically integrated companies. One-third of survey respondents cited four specific areas that achieved benefits in three months." * (Gartner "Survey Analysis: The Business Value of Manufacturing Execution Systems," Rick Franzosa, Simon Jacobson, October 18, 2019. *2018 Gartner's MESA Survey).

"Fast Value is a great reflection of what iBASEt provides our customers – making the complex simple. This new program lets manufacturers start small, move fast, and scale up with a proven model that can deliver value quickly," said Tom Hennessey, Vice President of Marketing, iBASEt.

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Infosys Launches Cyber Next Platform-Based Offerings, Powered by Microsoft Azure Sentinel 03 December 2019

Infosys announced the launch of its Cyber Next platform-based offerings, powered by Microsoft Azure Sentinel. These offerings will help enterprises enhance security monitoring, management, threat detection, and response services.

The Microsoft Azure Sentinel is a cloud-native Security Information and Event Management (SIEM), Security Orchestration, Automation and Response (SOAR) solution that detects, prevents and responds to data threats across the enterprise. With Azure Sentinel's advanced AI and security analytics features, this strategic partnership with Microsoft will significantly boost Infosys' threat detection and response capabilities.

These offerings will help Infosys enhance its Cyber Next Platform to deliver a comprehensive Managed Security Solution to its clients. This includes round-the-clock monitoring, lifecycle management and incident investigations, coupled with real-time threat intelligence for SIEM data enrichment. This will be delivered via a globally distributed network of Cyber Defense Centers, staffed with platform experts and skilled security analysts. Infosys' extensive security operations, managed security service capabilities, and a rich library of use cases, play books and pre-defined rules for ready ITSM integration, will help clients optimize Security Operations Center (SOC) efficiency and maturity.

"We are developing next-generation platform-based offerings that leverage Azure Sentinel to help customers simplify their security operations, and scale as they grow. The core functionalities offered by Azure Sentinel aligns with our philosophy of 'diagnose, design, deliver and defend' for leapfrogging the

cybersecurity maturity model, and leveraging intelligent analytics for effective SOC operations," said Vishal Salvi, CISO & Head CyberSecurity Practice, Infosys.

Ann Johnson, corporate vice president, Cybersecurity Solutions Group, Microsoft Corp.said, "We have a responsibility to bring new cybersecurity capabilities to our customers. By combining the strengths of the Microsoft security portfolio with Infosys service offerings, enterprises are able to better manage their security posture and navigate the changing threat landscape by leveraging the power of artificial intelligence."

The strategic Infosys and Microsoft collaboration combines the strength of Microsoft's portfolio and Infosys' service-based offerings to help enterprises effectively profile risks, prioritize, and manage threats comprehensively. This alliance is focused on building robust, systems, platforms and solutions to address end-to-end threat detection and response management across hybrid infrastructures, making enterprises secure, compliant, and trusted.

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Kubotek Announces KeyCreator 2020

02 December 2019

Kubotek3D announced the availability of a new major release of KeyCreator 3D CAD software. The 2020 version provides significant productivity improvements to many commonly used functions and updates to numerous CAD translators.

Productivity Improvements

"We focused our development process for 2020 on improvements to KeyCreator that would reach everyone," stated John Wright McCullough, GM Marketing, Kubotek3D.

Selection features which are used throughout the product from assembly management to drawings have been expanded to save steps but not interfere with established workflows. The time saved and productive feel of these small improvements really add up because they are used all day long. For example, drawing of a selection window now dynamically highlights the entities to be selected in real time and can be used in all-in or cross-select (part-in) modes based on window draw direction which saves several button-clicks.

React rapidly to unexpected changes

KeyCreator Pro 2020 continues the trend of adding DynaHandle support to functions to enable intuitive moving of entities along axes, either by dragging or entering offset values. For File Import, Paste (from Cut/Copy), and Insert Part Reference functions the new DynaHandle support provides the option for simple movement of the new entities after they have been placed. For the popular Box Move capabilities and Edit Blend adding DynaHandles delivers the ability to edit by dragging the cursor.

Quickly build precise models

To improve KeyCreator's 3D sketching power, the dynamic mode of the commonly used primitive solid

functions has been re-written to match the workflow of the traditional curve functions (ie. create line by endpoints). This means that when the third cursor location has been specified to set the height of a block or cylinder the solid is immediately stored in the part database. The new solid also changes to the active system color to provide the user feedback of that state. DynaHandles remain active on the new solid until the function is ended to allow for further editing if needed.

Updated CAD Translators

A new CAD file import translator for Industry Foundation Classes (IFC) files has been added in the 2020 release. The IFC format is an ISO standard data format used for Building Information Modeling (BIM) data, including assemblies, solids, and meshes.

Additionally, interoperability with other CAD software has been updated with the latest versions of 4 major CAD file formats:

Autodesk Inventor 2020

Dassault CATIA V5 R29 (R2019)

PTC Creo 6.0

Siemens NX 1847 (and drawings up to 1184)

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OpenText Delivers a Flexible Path to the Cloud, Enhanced Security and Compliance and Visibility into Supply Chain Risk

02 December 2019

OpenText announced its latest technology update, with innovations across its entire portfolio. This release further improves the capture, governance, exchange and use of information to drive productivity, growth and a lasting competitive advantage.

"OpenText builds the world's most impressive and compelling EIM platform, designed to help companies gain the agility, scale and capability they need to empower their workforces and delight customers," said Mark J. Barrenechea, OpenText CEO & CTO. "Today's release furthers this mission, bringing to market new SaaS and cloud-native apps, advanced security services and the most progressive supply chain management tools available."

Accelerating Cloud Leadership

This release advances the company's cloud leadership with the introduction of cloud-native applications for OpenTextTM Content Services, including OpenTextTM Content Suite Platform, OpenTextTM Extended ECM Platform, OpenTextTM DocumentumTM and OpenTextTM InfoArchive.

These cloud-native Content Services applications update automatically, scale dramatically, and run anywhere – both on- and off-cloud and represent important progress on the company's path to launching OpenText Cloud Editions (CE) in 2020.

OpenText has a growing portfolio of next-generation SaaS applications designed to manage information and content-intensive business processes. OpenText Core applications are built on OpenTextTM OT2 next-generation EIM-as-a-Service platform.

This release introduces:

OpenTextTM Core for Federated Compliance, a centralised application for oversight of records policies across multiple content repositories. Available immediately for Documentum, the application features a unique hybrid architecture which honours local control and data sovereignty requirements.

OpenTextTM Core Experience Insights, a SaaS application that provides marketing leaders full visibility over their customer's journey – from website interactions to email engagement, social media content and call centre performance.

These new applications join a roster of SaaS offerings, including the recently announced OpenTextTM Core Capture, OpenText Core Share, and OpenText Core Signature.

Addressing Today's Complex Security Challenges

Security is at the forefront of every OpenText product and service. This update, announced at OpenText Enfuse, provides new tools and capabilities to solve today's most complex investigative, legal, and information security challenges.

OpenText professional services now provides a threat-hunting service which integrates OpenTextTM EnCaseTM Endpoint Security with OpenTextTM MagellanTM AI and analytics to reduce response times and expedite the detection, response and remediation of threats. The new offering helps customers with incident response, regular threat-hunting to protect endpoints and networks, and ongoing security training and optimisation.

OpenTextTM EnCaseTM Endpoint Security adds powerful new tools to help security teams monitor and detect threats, including real-time continuous monitoring of endpoints with 400+ new anomaly detection values and new MITRE ATT&CK OOTB anomaly rules.

OpenTextTM EnCaseTM Forensics features enhanced search to help investigators discover deleted or modified information more quickly during forensic investigations.

OpenTextTM AI & Analytics helps ease some of the privacy and compliance requirements associated with regulations like GDPR and CCPA via the automatic identification of personal identifiable information (PII) in unstructured data and other sources.

The OpenText Identity and Access Management Platform helps customers secure identity and access management across domains, providing a frictionless, yet secure experience for users to ensure better security in a zero-trust world.

OpenTextTM TableauTM forensic hardware now includes first-to-market innovations to help save critical time for investigators via the ability to pause and resume any forensic imaging job, even after a power cycle.

Increasing Agility and Managing Risk in Trading Partners

To help enterprises speed time-to-market for supplier engagement and to reduce operational, financial and reputational risk in supplier selection, OpenText is introducing the OpenText Global Partner Directory, a searchable supplier sourcing and onboarding solution.

With the Global Partner Directory, enterprises can easily connect with suppliers on the OpenText Trading Grid, the world's largest cross-industry community of B2B supply chain trading partners. Advanced data filters within the Global Partner Directory enable users to rapidly and confidently identify the right suppliers to do business with based on multiple factors such as goods sold, company size, regional coverage, trading practices, protocol used and financial risk profile.

The Global Partner Directory will equip trading partners with tools to support corporate priorities for

ethical and sustainable supply chain operations.

"The Global Partner Directory will help customers gain visibility of their supply chain risk and take the first step towards ensuring ethical and sustainable supply chains," said Muhi Majzoub, EVP & Chief Product Officer, OpenText. "We have integrated intelligence and insight into the largest global community of trading partners, helping companies better understand who they are doing business with and ensure their values are aligned."

Delivering Continuous Innovation in EIM

New product updates across the OpenText portfolio provide enhancements to EIM productivity and efficiency.

Intelligent automation and AI integrations remove manual tasks and add value to business processes, including:

OpenText Axcelerate adds automated machine-translations of documents for global investigations in partnership with VeritoneTM and automated sentiment analysis and entity extract. OpenText eDOCS now features AI-powered search.

Content suggestion generation and translation in the OpenText Web Content Management Solution, TeamSite.

Enhancements to the OpenText Extended ECM Platform to enable allowing users to automate multiple simultaneous content-driven processes through asynchronous processing.

The ability to automate content-related processes with OpenText Vendor Invoice Management, enhanced with machine learning and optical character recognition.

Enhanced productivity and user experience bring new and efficient ways of working with and across OpenText products, including fresh new visualisations in OpenTextTM Magellan Analytics Studio, new authoring tools in OpenTextTM Exstream and a new mobile application for OpenTextTM Documentum. Integrations with world-class products and services improve business results and connect content, information and data to the digital business. This release brings new integration between OpenText Experience portfolio and OpenTextTM Hightail, Google Translate, Brightcove's video hosting platform, Salesforce.com, the Salesforce Marketing Cloud, and SAP®. OpenText Documentum for Life Sciences offers new integrations with Microsoft® SharePoint® Online and OpenTextTM Contract Center is now integrated with SAP®.

"This release brings immediate new value to our customers, helping to not only secure their operations and deliver cloud advances to streamline their IT infrastructure, but also help enable new ways working with advanced collaboration and automation features," continued Majzoub.

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Wipro Announces Advanced Cloud SOC Service Powered by Microsoft Azure Sentinel 04 December 2019

Wipro Limited announced the launch of advanced cloud Security Operations Centre (SOC) services using Microsoft Azure Sentinel.

As part of this integration, Wipro will offer managed cloud SOC services with built in Artificial Intelligence (AI) and Orchestration capabilities for rapid threat detection and response for its clients across hybrid cloud environments. In addition, AI based capabilities of Wipro HOLMESTM will be used to measure the risk factors against compliance standards. Apart from a large pool of skilled and experienced cyber incident responders and threat hunters, Wipro's Security Intelligence service will bring in the following differentiators:

Proprietary use-case creation framework with industry specific use-case libraries

Periodic service self-assessment on Log sources, use-case efficacy; benchmarking these facets to Lockheed Martin Kill chain and MITRE framework

Factory model System Integration for quick onboarding of event sources and creation of use-cases

Building security unique playbooks to automate workflow and processes, and leverage Azure Sentinel SOAR capabilities

Wipro is enhancing its cloud threat management capabilities in the form of an adaptive, intelligent and cloud-native SOC for single or multi-cloud customers. The partnership will focus on overall cloud security portfolio and will help Wipro's clients to accelerate their cloud journey, while also realising cloud benefits by doing business securely.

Raja Ukil, Senior Vice President and Global Head, Cyber Security and Risk Services, Wipro Limited said, "This unique cloud-native SOC capability will act as a catalyst in advanced threat hunting, detection, rapid remediation and protection in the cloud. We continue to provide advanced cloud security services to our clients and the partnership with Microsoft reinforces our commitment to bolster our cloud threat response service offerings."

"We want to empower our customers and provide them with the best technology and tools to help secure and modernize their environments" said Ann Johnson, Corporate Vice President, Cyber Security Solutions Group, Microsoft Corporation. "While cybersecurity is complex, it doesn't have to be complicated, and Wipro's integration helps organizations demystify cloud security and remediate security risks."