PLM Industry Summary

Sara Vos, Editor

Vol. 19 No 27 - Friday, July 7, 2017

Contents

CIMdata News

CIMdata Brings the PLM Industry's Premier Education and Training Program to the Boston Area

5 July 2017

CIMdata, Inc., the leading global PLM strategic consulting and research firm, will bring its highly acclaimed Product Lifecycle Management (PLM) Certificate Program to the Boston area from October 2-6. The program is recognized as the PLM industry's most comprehensive solution-agnostic education offering.

The program helps prepare PLM professionals to successfully address the challenges commonly faced in PLM strategy development and implementation. The assessment-based certificate program includes a personalized classroom experience, individual and team-based exercises, and individual evaluations of achievement. The program is facilitated by a team of CIMdata experts. Upon successful completion of the program, participants receive a CIMdata PLM Certificate and are invited to join CIMdata's global PLM Leadership community.

The program is built on CIMdata's over 30 years of experience guiding industrial companies in successfully defining and implementing best-in-class PLM strategies and tactics. The program is appropriate for industrial companies that are considering PLM or are already implementing PLM, and to PLM solution providers.

CIMdata's one-day Executive Short Course and two-day PLM Fundamentals for Solution Providers Short Course will also be available at this time.

For more information on CIMdata's PLM Certificate Program visit our website at http://www.cimdata.com/en/education/plm-certificate-program.

About CIMdata

CIMdata, a leading independent worldwide firm, provides strategic management consulting to maximize an enterprise's ability to design and deliver innovative products and services through the application of Product Lifecycle Management (PLM) solutions. Since its founding in 1983, CIMdata has delivered world-class knowledge, expertise, and best-practice methods on PLM solutions. These solutions incorporate both business processes and a wide-ranging set of PLM-enabling technologies.

CIMdata works with both industrial organizations and providers of technologies and services seeking competitive advantage in the global economy. In addition to consulting, CIMdata conducts research, provides PLM-focused subscription services, and produces several commercial publications. The company also provides industry education through PLM certificate programs, seminars, and conferences worldwide. CIMdata serves clients around the world from offices in North America, Europe, and Asia-Pacific. To learn more about CIMdata's services, visit our website at www.CIMdata.com, follow us on Twitter: http://twitter.com/CIMdataPLMNews, or contact CIMdata at: 3909 Research Park Drive, Ann Arbor, MI 48108, USA, Tel: +1 734.668.9922. Fax: +1 734.668.1957; or at Oogststraat 20, 6004 CV Weert, The Netherlands, Tel: +31 (0) 495.533.666.

Click here to return to Contents

CIMdata Management Team Transitions

6 July 2017

CIMdata, Inc., the leading global PLM strategic management consulting and research firm announces three changes in its management team. As of 1 July 2017, Alan Christman has been elected to the role of Chairman Emeritus and will continue to be an adviser to the Board of Directors. Alan served as Chairman of CIMdata from 2009 through June 2017. John MacKrell has been elected to Chairman following seven years as the corporation's Vice President. Stan Przybylinski has been elected to the corporate Vice President position and to membership on the Board of Directors. Stan had served as Vice President of Research since 2013 and will continue to head CIMdata's highly regarded research activities.

Peter Bilello, CIMdata's President and Managing Director, stated, "Al has been a valuable CIMdata team member for more than 25 years, and I look forward to continuing to work with him and the rest of the Board of Directors in the coming months and years. This is an exciting time at CIMdata and having additional management perspective is priceless."

About CIMdata

CIMdata, a leading independent worldwide firm, provides strategic management consulting to maximize an enterprise's ability to design and deliver innovative products and services through the application of Product Lifecycle Management (PLM) solutions. Since its founding in 1983, CIMdata has delivered world-class knowledge, expertise, and best-practice methods on PLM solutions. These solutions incorporate both business processes and a wide-ranging set of PLM-enabling technologies.

CIMdata works with both industrial organizations and providers of technologies and services seeking competitive advantage in the global economy. In addition to consulting, CIMdata conducts research, provides PLM-focused subscription services, and produces several commercial publications. The company also provides industry education through PLM certificate programs, seminars, and conferences worldwide. CIMdata serves clients around the world from offices in North America, Europe, and Asia-Pacific. To learn more about CIMdata's services, visit our website at www.CIMdata.com, follow us on Twitter: http://twitter.com/CIMdataPLMNews, or contact CIMdata at: 3909 Research Park Drive, Ann Arbor, MI 48108, USA, Tel: +1 734.668.9922. Fax: +1 734.668.1957; or at Oogststraat 20, 6004 CV Weert, The Netherlands, Tel: +31 (0) 495.533.666.

Click here to return to Contents

Dassault Systèmes' Science in the Age of Experience Conference 2017 (Commentary)

6 July 2017

Key takeaways:

- *Dassault Systèmes, continues to follow through on implementing its vision to enable sustainable innovation through the use of its 3DEXPERIENCE® platform, supported by the BIOVIA, GEOVIA, and SIMULIA brands.*

- *SIMULIA continues to improve its Additive Manufacturing simulation and process capabilities to take advantage of the latest advances in material sciences and manufacturing.*

- *Industry's next big challenge is to enable the cultural change required to make better use of already available simulation and prediction technology.*

The second Dassault Systèmes' Science in the Age of Experience conference brought users from various industries and academia from around the world together in the Midwest digital manufacturing capital of

Chicago. In addition to Dassault Systèmes' brands BIOVIA and SIMULIA a third brand, GEOVIA, participated in this year's event. The GEOVIA brand, formerly Gemcom Software before its acquisition by Dassault Systèmes in 2012, with its current focus on mining, has the general objective to model and simulate our planet, improving predictability, efficiency, safety, and sustainability throughout the natural resource sector.

By including GEOVIA, Dassault Systèmes consequently not only continues its focus on innovation but even more specifically on sustainable innovation, which was also the underlying theme for this conference. The focus throughout the conference addressed sustainable innovation in various ways following the sub-themes of:

- Sustainable planet

- Better living through science

- Multi-physics scientific discovery

- Advancing materials with science—materials innovation

Mr. Bernard Charlès, President and CEO of Dassault Systèmes, stated that a "holistic approach is required to achieve sustainable innovation." This includes systems-level and multi-scale thinking and execution. He added, at the same time "the future of innovation is not just what you do within a company but how you connect beyond and make use of the [available] data. It is just a matter of time that "everything is brought together—social, life, product, and nature."

Dassault Systèmes' 3**D**EXPERIENCE platform appears to deliver on this vision. The platform attempts to bring the brands together to support various industry segments (Dassault Systèmes has identified 12 industry segments). With its focus on delivering full capabilities of 3D modeling, content and simulation, social and collaborative innovation, and information intelligence, it's enabling the vision for their respective end users and customers to achieve sustainable innovation for their businesses. At the same time, it is part of helping Dassault Systèmes' customers address challenges they are still facing as highlighted during a market analyst session, such as:

- Digital continuity: There is an enormous need to digitalize the business—its content and processes—and link the different areas together. One needs to be able to follow an idea from inception until bringing it onto the market, actually making and using it.

- Multi-physics: Even more so nowadays, systems thinking requires that all the different physics need to be simulated properly to ensure the product requirements are addressed upfront (within a company and beyond, including a product's operating environment).

- Collaboration between engineering domains and across the virtual enterprise: The platform must allow for a model-based and data-driven business. But the organizational culture within companies to make proper use of model-based processes is quite often not there, yet. CIMdata experience shows that this remains a major challenge.

- Business sense: By linking the entire lifecycle together it allows users to better understand why certain tasks are being performed and how those workflows are linked to initially set and then attain derived business requirements.

During the conference, a car body was used as an example to show the benefits of using the 3**D**EXPERIENCE platform starting with the requirements, through concept and detailed design to validation. It enacted elements, like 3DDashboard, design and simulation apps, results analytics, multi-

physics apps, ABAQUS in the cloud, and process management apps. Compared to previous releases, this new platform release makes it easier for the various domains and disciplines to execute their specific tasks while collaborating to evaluate and achieve target requirements.

Various keynotes by UI LABS, Google Autonomous Car Project, Nagoya Hospital, and Wartsila highlighted from different perspectives the importance of properly capturing and linking data throughout the entire life cycle; enabling collaboration and process management through the use of a common innovation platform; applying model-based systems engineering thinking, understanding that products and technology are not standalone but interacting with their surroundings; as well as the positive impact simulation and virtual collaboration have within life sciences.

Simulation overall plays a major strategic role in a model-based and digitalized business. SIMULIA is not just part of Dassault Systèmes' 3**D**EXPERIENCE platform, but the focal point for most of Dassault Systèmes' engineering simulation related development work while, at the same time making use of the capabilities of the underlying platform. Mr. Scott Berkey, CEO of SIMULIA, highlighted how this can help overcome silos and bring domains and physics together by unifying them. At the same time, processes and thinking need to be adjusted to achieve digital continuity. This includes:

- Data needs to be properly captured and managed digitally

- Being able to capture and share best practices

- Identify and define different roles throughout the entire process to be able to execute properly

- Enable global collaboration and execution

- Define and select the technology and tools needed to execute

This is supported by SIMULIA's strategy of how its products are being developed and deployed:

- Social: Tools need to be easy to use, available through online connectivity and mobile devices.

- Industry: Provide business solutions that are specific for the various industry in order to make proper use of a tool's full capabilities to achieve the industry's business requirements.

- Experiences: The software service and its content have to fulfill the overall simulation needs of the business while operating on the platform. This can be achieved through proprietary and third-party tools and apps operating on the platform.

Thus, Dassault Systèmes and, particularly SIMULIA continues expanding on its multiphysics / multiscale capabilities (see Figure 1). This aligns very well with CIMdata's current work on defining platforms for PLM to help companies gain more advantage from their PLM investments.
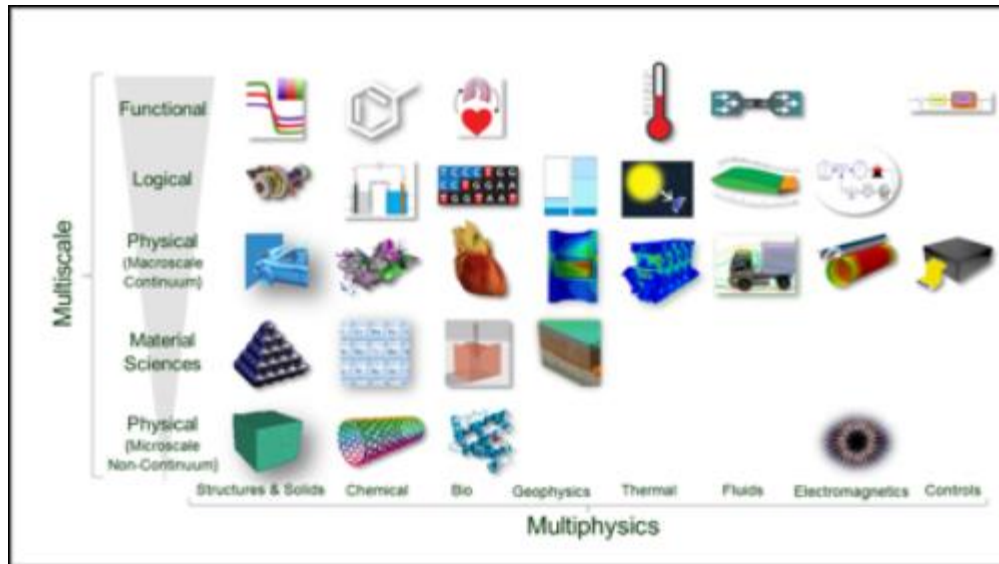
Figure 1—Simulation Covers the Entire Multiscale and Multiphysics Space
(Courtesy of Dassault Systèmes)

This is not just bringing the various brands together on the platform but also adding to the brand portfolio (see Figure 2).

In 2016 SIMULIA added the following tools and technologies to its portfolio:

- XFlow: CFD

- CST: electromagnetic simulation

- Wave6: Vibro-acoustics and flow noise simulation
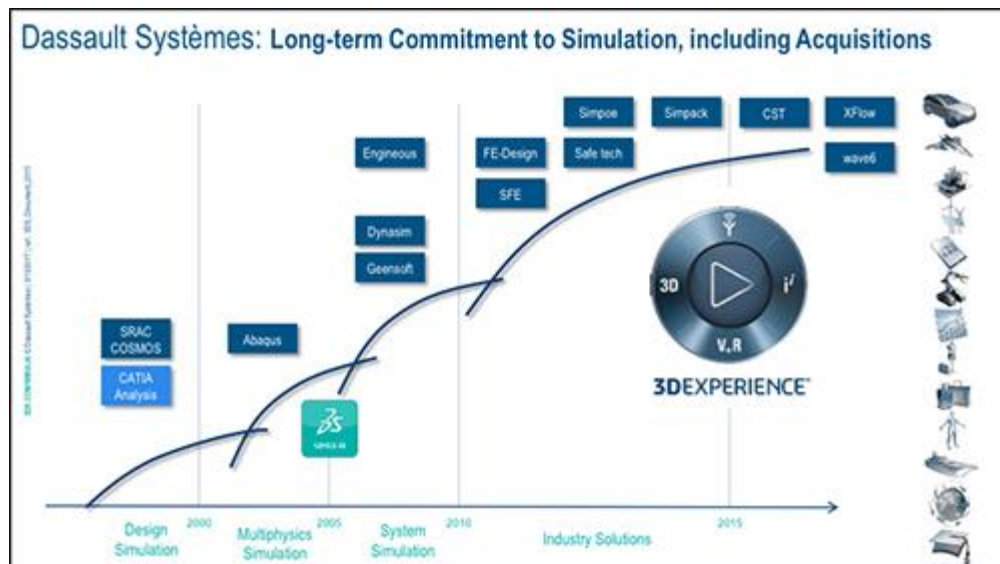
Figure 2—Dassault Systèmes Long-Term Commitment to Simulation
(Courtesy of Dassault Systèmes)

Further progress made over the last year in the area of additive manufacturing (AM) as part of the multiscale / multiphysics challenge was presented. This is reflected by the fact that, besides discussions and presentations during the conference itself, an AM Symposium was a featured event during the

conference. CIMdata believes that SIMULIA plays a leading role in this area and is publishing a commentary on this AM Symposium in parallel to this Commentary.

While the technology now available is getting much better and even faster in being able to support the enablement of sustainable innovation, it was highlighted in several discussions that it is paramount that business cultures within industry still have a long way to go in order to make proper use of the available technology. Thus, as CIMdata highlighted in last year's commentary, today the main challenge is still to implement cultural change, fundamentally modifying the ways in which companies operate to make sustainable innovation happen. Virtual and physical engineering need to be brought together. This starts with a consequent deployment of systems thinking, and understanding of the engineering Vee in terms of iterative processes and not just a sequential approach.

In CIMdata's view, Dassault Systèmes continues to make significant progress on making the tools of its various brands an integral part of its 3**D**EXPERIENCE platform. At the same time, CIMdata's research shows that it is paramount for platforms to stay open to non-proprietary applications to ensure that users can get the full advantage of using the platform as well as making use of emerging data interoperability standards. In addition, the clear focus on industries and their specific processes instead of just brands will allow end users to make much more use of these available tools.

In CIMdata's opinion, with the capabilities of BIOVIA, GEOVIA, and SIMULIA on a common platform, Dassault Systèmes continues to display a compelling vision of how science can and will enable sustainable innovation. The major challenge CIMdata sees going forward is how to gain the momentum needed to apply cultural change to make full use of the technology which is already available.

About CIMdata

CIMdata, a leading independent worldwide firm, provides strategic management consulting to maximize an enterprise's ability to design and deliver innovative products and services through the application of Product Lifecycle Management (PLM) solutions. Since its founding in 1983, CIMdata has delivered world-class knowledge, expertise, and best-practice methods on PLM solutions. These solutions incorporate both business processes and a wide-ranging set of PLM-enabling technologies.

CIMdata works with both industrial organizations and providers of technologies and services seeking competitive advantage in the global economy. In addition to consulting, CIMdata conducts research, provides PLM-focused subscription services, and produces several commercial publications. The company also provides industry education through PLM certificate programs, seminars, and conferences worldwide. CIMdata serves clients around the world from offices in North America, Europe, and Asia-Pacific. To learn more about CIMdata's services, visit our website at www.CIMdata.com, follow us on Twitter: http://twitter.com/CIMdataPLMNews, or contact CIMdata at: 3909 Research Park Drive, Ann Arbor, MI 48108, USA, Tel: +1 734.668.9922. Fax: +1 734.668.1957; or at Oogststraat 20, 6004 CV Weert, The Netherlands, Tel: +31 (0) 495.533.666.

[⬆]*Click here to return to Contents*

Science in the Age of Experience Additive Manufacturing Symposium: An Assembly of AM Thought Leaders (Commentary)

6 July 2017

Key takeaways:

- *Like a TED conference with an Additive Manufacturing (AM) theme, speakers came from government agencies, industrial companies, academia, and tech startups, hosted by Dassault Systèmes, to deliver the current state and future vision of an end-to-end AM design to manufacturing lifecycle.*

- *Problems such as repeatability, warpage, cost, time, and lack of education all present barriers to adopting AM to make production parts. Fortunately, the solution providers, material makers, standards and academic institutes which spoke at the event are rallying to help customers make AM parts for end use.*

- *Dassault Systèmes demonstrated their 3DEXPERIENCE suite of connected AM applications: BIOVIA, CATIA, SIMULIA, and DELMIA which illustrated what's available today to help customers design and make AM parts. Customers can choose whether to adopt incrementally, as point solutions, or holistically to provide an end-to-end platform for designing, simulating, and making AM production ready parts.*

Dassault Systèmes' Additive Manufacturing Symposium, held May 15th,2017 at The McCormick Place Convention Center in Chicago, Il., preceded their Science in the Age of Experience conference featuring customer presentations and the latest technology advancements from their SIMULIA, BIOVIA, and GEOVIA brands. By combining additive manufacturing (AM) with SIMULIA, BIOVIA, and GEOVIA brands at the same conference, Dassault Systèmes has signaled a new approach to design, leveraging biological, chemical, and material innovations combined in the physical environment, with the ability to fully simulate, design, and make the contemplated product. It doesn't seem too long ago that Dassault Systèmes' customer conferences were a series of discrete events grouped under their separate brands and industries. Under the manufacturing stream, CATIA was at the core; the big news was new add-ons to the core mechanical 3D CAD solution. My how times have changed!

In conjunction with the Additive Manufacturing Symposium, Dassault Systèmes hosted an AM Hackathon. That event started in the afternoon session of the Symposium and continued throughout the entire Science in the Age of Experience conference. The AM Hackathon posed challenges to participants based on real-world problems proposed by industry experts. Teams were assembled based on areas of interest and attendee expertise, and comprised industry and academia. Adding a hackathon next door to the speaking gallery, established a linkage between presentations by experts to everyday people facing design challenges. This validated that, with the right tools, AM can help solve practical design problems facing engineers today.

The symposium speakers came from diverse backgrounds within the AM community. Represented were AM machine makers, AM materials makers, academic institutes, standards and certification authorities, government agencies, tech. startups, research institutes, and finally Dassault Systèmes to wrap it up. Even the on-stage hosts for most presentations were not Dassault Systèmes employees. The open forum offered a fertile environment for people to share ideas and experiences about how AM is changing the way we make things. Dassault Systèmes as host, rather than software sales company, showed confidence, credibility, and vision with their mixed thought leader and software solution provider role; a combination which is essential to guide and support customers in their journey toward making AM production products.

Key Addresses & Messages

There were 19 presentations throughout the symposium. What follows is a summary of several of these insightful presentations.

Mr. Derek Luther, Adidas Group, presented "Evolution of AM at Adidas". Mr. Luther, based at Adidas' Portland Oregon North American Headquarters, shared Adidas' impressive AM vision and current advances in shoe production using AM. Incidentally, Adidas world headquarters is a small Bavarian German town called Herzogenaurach, is a difficult location to which to attract young talent with skills in digital design and advanced manufacturing such as AM. But hip Portland, the home of NIKE, makes a logical choice for pioneering AM in shoe production. Mr. Luther described their design process for the FUTURECRAFT 4D athletic shoe where using latticing techniques, a unique pair of shoes can be made for a specific athlete. Using AM specific design tools, lattice structures of the sole are controlled to the cell level. Not only that, each shoe (i.e. left and right) is unique, and conforms exactly to the athlete's foot shape and weight, to optimize for movement, cushioning, stability, and comfort performance. Mr. Luther emphasized the new, much shorter design to manufacture process compared to traditionally molded parts: research collaboration, Design for Additive Manufacturing (DfAM) including topology optimization (TopOpt), FEA, then finally PRINT. Although Adidas' website states the FUTURECRAFT 4D will be available fall 2017, some 300 shoes have already been made with a target to scale to 5,000 by the end of the year. Scaling AM production to that volume will surely pose some challenges considering the custom design process, manufacturing quality and repeatability need, and often underestimated, Product Lifecycle Management (PLM) to manage change, design and manufacturing process settings, security of AM digital assets, and repeat orders. Knowing Adidas, we expect they have a plan.

Mr. John Vickers, NASA, presented "NASA's Additive Manufacturing Development Materials Science to Technology Infusion—Connecting the Digital Dot." Mr. Vickers, principal technologist in advanced materials and manufacturing at NASA, shared some insights into how AM is needed for space exploration. The obvious case highlighted was spare parts. You can't store inventory of all spare parts for the International Space Station (ISS) or Mars Curiosity (Rover) in space; it's simply not practical given the cost and time of space travel (e.g., 8 months to Mars). Clearly there's a business case to use AM parts produced locally in space where and when needed. Mr. Vickers highlighted that ISS has a functioning AM printer on board now.

Mr. Jerry Feldmiller, Orbital ATK, made a presentation entitled, "The Importance of Industry Participation with AM Companies in Shaping Future Hardware, Software, and Materials Development." Orbital ATK is a global leader in aerospace and defense technologies, especially launch vehicles. Mr. Feldmiller emphasized that AM user groups are critical to disseminating valuable knowledge, lessons learned, and maximizing AM machine utilization. He encouraged the formation of user groups organized by industry work streams. He also emphasized how essential it is to connect all AM digital assets and processes using a Digital Thread. After his presentation, he was asked how Orbital ATK manages change and maintains the final product master record of the entire AM design. He commented that Orbital ATK creates a master PDF, like a container, which has a complete record of materials, machine settings, quality standards, etc. Orbital ATK, using a master PDF, has found a way to protect corporate AM IP from being lost. Although a PDF may not manage all lifecycle events that preceded the result, or the changes along the journey, it does help maintain a master source of truth to refer to whenever they need to make the same or similar AM parts in the future.

Dr. Tim Simpson, Penn. State University (PSU), presented "Design for Additive Manufacturing: Challenges and Research Opportunities" emphasizing the urgent need to improve DfAM practices and tools by drawing attention to the wide range of issues still confronting industry as AM transitions from prototyping into production. Dr. Simpson, a professor in mechanical and nuclear engineering, and industrial and manufacturing engineering departments, at PSU is a prolific author with more than 300 papers to his name, and has been a TED™ speaker. He lamented that "…we lay it down in ŋm but it

warps in mm," referring to warpage issues when printing titanium. He also spoke about the commercial issue of buying a printer saying that "…customers seek an apples-for-apples comparison (to what they know) when justifying an AM printer." What he was referring to is the problem of overlooking the hidden justification of AM because customers compare how they make a part today, say an injection molded part, to how they can make the same part in an AM machine (i.e., customers want to know how much faster/better/cheaper can I make the same part using AM). He correctly identified the flawed logic by not considering the re-design opportunity that AM provides. An injection molded part may be lightened by 90% by using DfAM methods and tools to redesign the part for an AM machine. Essentially, he was highlighting the urgent need for education about DfAM and AM production technologies, more than improvements needed to tools and machines. Additionally, he made a good point that CAD design tool user interface paradigms rely on lines and arcs as conventional engineering input techniques. He encouraged the audience to emulate the game Minecraft™ to approach design. To do this, engineers need to un-learn much about how they approach design today, because AM frees us from many manufacturing conventions downstream. He also made a significant point about security risk for AM digital assets by showing a chart titled "US Reported Cyber Incidents by Critical Infrastructure Sector" (Source: Department of Homeland Security, 2015), which highlighted how cyber-attacks on Manufacturing companies were far higher than any other industry such as Defense and Finance. This was both a surprise and a wakeup call to the audience, because, although it's not possible to steal an injection mold needed to make a part through the public internet, it is possible to steal AM digital assets, allowing someone to immediately make parts in multiple locations around the world.

Mr. Jacob Rome, The Aerospace Corporation, spoke on "Process Simulation for Developing and Qualifying AM Parts for Space Applications." Mr. Rome started by making an interesting statement, "GE doesn't look at individual parts, they look at subsystems." We have all heard of GE's advances with AM production parts, but this insight is significant because it applies broadly to any company considering AM in production. The real opportunity to make significant gains from AM is to look at redesigning subsystems not just individual parts, because AM allows us to escape many traditional manufacturing conventions (e.g., the way we build two-piece enclosures that contain individual components, and then secure them with fixing devices such as screws, bolts, and adhesives. Mr. Rome then lead through a series of slides titled "Guidelines for Design for Additive Manufacturing (DfAM)" to offer a very pragmatic process overview of each stage of DfAM. The initial design slide depicted how requirements and standards flow into functional requirements, acceptance test requirements, qualification requirements, loads and environments, and finally, mating interfaces. After requirements comes design iteration, which brings in materials development. The initial design overview was followed by material variability, manufacturing baseline, production, and finally process simulation using physics-based modeling. Mr. Rome, correctly, highlighted the need to design whole processes not only part geometry. Clearly there's more to DfAM than outputting a CAD STL file to an AM machine.

Dassault Systèmes closed off the day with a 3**D**EXPERIENCE demonstration highlighting CATIA, SIMULIA, and DELMIA applications supporting the complete AM product lifecycle, from design and development to simulation and part fabrication. CATIA Generative Shape Design using a dynamic slider to alter design variables such as design space, load, mass etc., showed how a part could be made four-times stiffer with 40% weight reduction, perfectly highlighting advantages of DfAM. DELMIA powder bed fabrication demo showed thermal interaction between parts within the build tray, to highlight machine level simulation but right up in the design stage. Dassault Systèmes' 3**D**EXPERIENCE end-to-end solution demonstration book-ended the day by showing they offer a flexible AM framework for design, optimization, stress analysis, and manufacturing process simulation. This helps customers

understand consequences of their AM design choices throughout the lifecycle, before committing to manufacture, which enables engineers to make better designs, save time, reduce material wastage, and save cost.

Concluding Remarks

Dassault Systèmes' Additive Manufacturing Symposium, comprised 19 short presentations, and was both innovative and insightful. It felt like a TED conference dedicated to AM, yet was hosted by a leading PLM solution provider, Dassault Systèmes, whose presence was subtle throughout. The various speakers highlighted both groundbreaking advances, and frustrating impediments to adoption of AM into production, yet confidence is obvious that AM is here to stay. Drawing from a conversation CIMdata had with Mr. Scott Berkey, CEO SIMULIA, Mr. Berkey said "By bringing together leading experts and thought leaders in additive manufacturing from academic institutes and industrial companies, Dassault Systèmes is helping our customers learn about the latest advances and practical challenges related to making production ready AM parts. The 3**D**EXPERIENCE platform addresses the end-to-end AM process from material design to manufacturing processes and testing. It provides a single source of design, engineering, and manufacturing parameters including; material science, functional specification, generative design, optimization, production, and certification."

Although AM has been around for decades, there is a lot of work still to do—especially in DfAM education, production quality, repeatability, cyber security, material science, and lifecycle management. Dassault Systèmes is committed to reinventing how we think about, design, and make all the things we use in our lives. Their question: "If we simulate down to the infinitely small, can we harmonize the infinitely big?" alludes to this new, innovative approach to making products, and hints of more to come. Dassault Systèmes' 3**D**EXPERIENCE suite of connected AM applications—BIOVIA, CATIA, SIMULIA, and DELMIA—might look initially like a collection of disparate brands, yet makes complete sense in the context of this question. CIMdata looks forward to observing, researching, and influencing the continuing AM journey.

About CIMdata

CIMdata, a leading independent worldwide firm, provides strategic management consulting to maximize an enterprise's ability to design and deliver innovative products and services through the application of Product Lifecycle Management (PLM) solutions. Since its founding in 1983, CIMdata has delivered world-class knowledge, expertise, and best-practice methods on PLM solutions. These solutions incorporate both business processes and a wide-ranging set of PLM-enabling technologies.

CIMdata works with both industrial organizations and providers of technologies and services seeking competitive advantage in the global economy. In addition to consulting, CIMdata conducts research, provides PLM-focused subscription services, and produces several commercial publications. The company also provides industry education through PLM certificate programs, seminars, and conferences worldwide. CIMdata serves clients around the world from offices in North America, Europe, and Asia-Pacific. To learn more about CIMdata's services, visit our website at www.CIMdata.com, follow us on Twitter: http://twitter.com/CIMdataPLMNews, or contact CIMdata at: 3909 Research Park Drive, Ann Arbor, MI 48108, USA, Tel: +1 734.668.9922. Fax: +1 734.668.1957; or at Oogststraat 20, 6004 CV Weert, The Netherlands, Tel: +31 (0) 495.533.666.

Click here to return to Contents

Acquisitions

Accenture Acquires Intrepid

28 June 2017

Accenture has acquired Boston-based mobile design and development firm Intrepid. As connected devices become increasingly popular and continue to proliferate in environments such as the home, office and vehicles, Accenture is expanding its capabilities to help organizations create engaging mobile experiences for customers at speed and at scale.

Intrepid's 150 employees have joined Accenture Digital as a result of the acquisition. The team will focus on the rapid development of innovative digital services and solutions, using agile tools in a collaborative environment where clients can work side by side with Accenture designers, engineers and mobile experts. Intrepid expands Accenture's capabilities in design, native app development, connected device engineering and web development in North America, strengthening its ability to help clients take the lead in an era where connected experience is the new battleground.

Intrepid is focused on nurturing talent and innovation to create excellent user experiences. At Procter & Gamble, Intrepid developed an app that allows consumers to control and monitor their cloud-connected Febreze Home smart devices. For Saucony's Human Performance and Innovation Lab, Intrepid developed Stride Lab, an app that helps runners assess their stride to improve efficiency and avoid injury.

"Mobile solutions are a cornerstone of digital business transformation and their design and development is a source of continued differentiation for Accenture Digital," said Ankur Mathur, managing director, Accenture Digital. "When combined with connected devices they offer a broad set of opportunities for our clients to re-invent their business models. We are delighted to bring Intrepid's highly skilled team into Accenture and to help scale what Intrepid offers to clients today. Our shared values of people-first, disruptive innovation and continuous learning make Intrepid a great fit for Accenture."

"It has long been our mission to build great digital experiences and bring connected devices to life for everyone, everywhere," said Mark Kasdorf, founder and CEO of Intrepid. "We are thrilled to join Accenture and become part of a global network of leading designers and developers who are just as driven as we are to empower people through experience-led innovation. We will be better equipped to seamlessly scale the solutions we design and build in our studio to clients around the world, expanding the impact of beautiful apps that deliver real results."

With a strong heritage in delivering rich mobile experiences to consumers and integrating apps with connected devices, Intrepid operates a culture based on creative innovation using the latest technologies, and will be a valuable addition to Accenture Digital.

[↑]*Click here to return to Contents*

Agilent Technologies to Acquire U.K.'s Cobalt Light Systems for GBP40M

7 July 2017

Agilent Technologies Inc. today announced it has acquired Oxfordshire, U.K.-based Cobalt Light Systems ("Cobalt"), a provider of highly differentiated Raman spectroscopic instruments for the pharmaceutical industry, applied markets and public safety.

Cobalt's innovative suite of benchtop and handheld/portable Raman spectroscopic instruments are based on proprietary technologies that enable through-barrier identification of chemicals and materials. Traditional solutions based on conventional spectroscopy have limited capacities for detection of materials through sealed, non-transparent containers and are constrained to near-surface identification of materials such as pharma tablet coatings and containers. By enabling measurement through opaque barriers and surfaces, Cobalt's solutions can analyze whole tablets or inside sealed containers reducing the need for quarantines and time-consuming sample processing and testing in pharmaceutical QC, hazardous chemical ID and security. The result is significant time, cost, and resource savings for customers as well as increased safety for certain market segments such as first responders or air passengers.

Cobalt's customers include more than 20 of the largest 25 global pharmaceutical companies, and more than 75 airports across Europe and Asia-Pacific, including eight of the 10 largest European airports, with over 500 devices deployed at airport checkpoints. Recently, Cobalt has entered the hazardous substances markets with its handheld platform.

"Raman spectroscopy is one of the fastest-growing segments in spectroscopy," said Phil Binns, vice president and general manager of Agilent's Spectroscopy and Vacuum Solutions Division. "This acquisition gives our customers access to state-of-the-art Raman spectroscopy technology. It also provides Agilent immediate entry into this fast-growing segment with a highly competitive, differentiated offering."

"This is exactly the type of acquisition that Agilent's strategy calls for – one that expands our market share and provides immediate benefits to our customers," said Patrick Kaltenbach, president of Agilent's Life Sciences and Applied Markets Group. "We're focused on delivering best-in-class solutions to our customers, and Cobalt's Raman spectroscopy product and team meet and exceed that criterion."

"Cobalt and Agilent have similar cultures focused on customer-centric innovation," Cobalt CEO Paul Loeffen said. "The combination of Cobalt's patented technologies with Agilent's product-development expertise, manufacturing capabilities, channels and customer base will allow us to scale our operations to take advantage of this rapidly growing market."

Agilent is acquiring Cobalt for £40 million in cash.

Cobalt is privately held with 52 employees. Cobalt's CEO will remain with Agilent as the Director of Raman Spectroscopy. Oxford will become Agilent's global center for Raman spectroscopy. Cobalt has received numerous prestigious awards since the company was founded in 2008 including The Queen's Award for Enterprise in 2015 and the 2014 Royal Academy of Engineering MacRobert Award. It was also ranked as one of the U.K.'s fastest-growing technology companies in 2014.

Click here to return to Contents

CENIT AG assumes majority interest in SynOpt GmbH

3 July 2017

On July 1, 2017, CENIT AG acquired a majority interest in SynOpt GmbH, based in Leinfelden-Echterdingen (Stuttgart). The move expands CENIT's competency and portfolio in the field of

simulation solutions.

As a small, highly specialized company, SynOpt has relied on its strong consulting expertise to become a leading German simulation expert for structural analysis, metal shaping and chipping. In technology terms, SynOpt's expertise is based on SIMULA solutions by Dassault Systèmes and DEFORMTM solutions by the Scientific Forming Technologies Corporation.

SynOpt has set itself the goal of consulting and operatively supporting clients in virtual product development across all process phases: The company's portfolio includes potentials analysis, methodological development and software integration, as well as custom development and automation of simulation procedures.

"As a major partner of Dassault Systèmes, we possess extensive expertise in the simulation field. The merger with SynOpt allows us to leverage the wide-ranging competency and deep process knowhow of our new colleagues to provide our customers with even more mature solutions. In this way, we are enhancing our position as partners to manufacturing businesses, supporting them in optimizing their digital product development process (PDP) in the context of Industry 4.0", explains Kurt Bengel, Spokesman of the Board of CENIT AG.

"For SynOpt, the integration into CENIT Group also represents clear added value", says Dr. Martin Herrmann, CEO of SynOpt GmbH in describing the development. "We profit by collaborating with CENIT's expert network and gain the means to jointly tap new customers and market segments".

Following the acquisition of KEONYS S.A.S., the French market leader for Dassault Systèmes-based SIMULIA solutions, CENIT is leveraging its stake in SynOpt GmbH to further expand its position in the growing simulation market.

Click here to return to Contents

CENIT concludes KEONYS acquisition, raises sales forecast for 2017

3 July 2017

On July 1, 2017, CENIT AG purchased the shares of KEONYS S.A.S., Paris, to successfully conclude the acquisition of the company. KEONYS is a leading European reference partner for software integration in product lifecycle management (PLM) and 3D design based on software products by Dassault Systèmes.

With 150 staff at ten locations in France, Germany and the Benelux countries, KEONYS generated sales of approx. 56 million Euros in 2016. The successful integration of KEONYS makes CENIT Group the most important international partner of Dassault Systèmes and the European market leader in the product lifecycle management field.

As a result of the acquisition, CENIT is raising its growth forecast for the 2017 business year. With EBIT remaining virtually unchanged, the company expects on-year sales growth of about 25% to approx. 150 million Euros.

Click here to return to Contents

Company News

Collaborative Engineering: Phoenix Integration Joins the Altair Partner Alliance

6 July 2017

The Altair Partner Alliance (APA) is pleased to announce the addition of Phoenix Integration's ModelCenter to its software offering. ModelCenter is a vendor-neutral software framework for creating and automating multi-tool workflows, optimizing product designs, and sharing engineering data and knowledge. ModelCenter Integrate increases productivity by enabling users to execute significantly more simulations using less time and resources. ModelCenter Explore drives innovation and improves product quality by enabling users to thoroughly explore and understand the design space, make better decisions, and find optimal solutions. ModelCenter's MBSEPak unlocks the promise of Model Based Systems Engineering (MBSE) by connecting engineering analyses to the systems model.

"Collaborative Engineering is becoming more of the norm due to increased interactions between different disciplines as we try to achieve even tighter compromises between them. This leads to more multi-disciplinary studies that involve the use of many tools of different natures such as pre-processing, solving, post-processing and reporting. As workplaces become more dynamic, engineers look for more intuitive user experiences; the need for capable, robust process integration platforms has increased," said Fatma Kocer, VP Business Development Design Exploration. "I am excited about the addition of Phoenix Integration to the Altair Partner Alliance as ModelCenter will enhance our users' experience for process integration. ModelCenter working with HyperWorks products will allow our users to easily set up multi-disciplinary projects and start design exploration."

Phoenix Integration's ModelCenter Integrate software solution is a model-based engineering framework that provides users with a wide variety of tools and methods to encapsulate individual analysis or simulation models, store them as reusable components, and create simulation workflows. Almost any software application can be included in a workflow; user created tools, legacy FORTRAN/C++ programs, spreadsheets, mathematical models, databases, as well as Computer Aided Design (CAD) and Computer Aided Engineering (CAE) models. ModelCenter Explore is a graphical environment for design investigation and optimization that supports the entire product development team. Once a repeatable simulation workflow has been created with ModelCenter Integrate, engineers can iteratively execute the workflow (using parallel computing resources if available), with each run corresponding to a different set of inputs. This allows engineers to explore and quantify the performance, cost, reliability and risk of a large number of different design alternatives in a relatively short period of time.

"We are very excited for ModelCenter to be part of the Altair Partner Alliance," said James Mullins, VP Operations at Phoenix Integration. "ModelCenter will allow existing HyperWorks customers to analyze more alternatives and gain a much better understanding of their design space by giving them both power and flexibility. ModelCenter® provides significant capabilities to integrate and drive the impressive suite of tools in the Altair Partner Alliance providing customers with a unique and dynamic capability that will have an immense impact on their business."

ModelCenter Integrate is utilized by engineers and analysts to automate and analyze workflows that require computation and is applicable across virtually any industry.

An introductory webinar for Phoenix Integration will be held on July 13 at 10 a.m. ET. For more information about the software, please visit the product page for ModelCenter.

Fourth Dimension Solutions Limited Enter into a System Integrator Alliance Agreement with Dassault Systemes

7 July 2017

Fourth Dimension Solutions (FDS) has announced it has partnered with Dassault Systèmes to provide System Integration (SI) services for Dassault Systèmes' portfolio of applications and industry solution experiences based on the 3**D**EXPERIENCE platform in the Indian Sub-Continent Market. The agreement covers both SI services and as well product/license sale as FDS plans to increase its revenue from implementation services.

Amalendu Mukherjee, Managing Director, FDS Ltd., said, "This is a significant landmark for FDS both locally and globally as our presence and capabilities in an evolving DPMS industry will be enhanced by the 3DEXPERIENCE platform from Dassault Systèmes. FDS' holistic approach offers organizations with future ready solutions that provide competitive advantage and market differentiation."

Samson Khaou, Managing Director, India, Dassault Systèmes said, "We are delighted to be associated with FDS, an organization that has the scale, experience and ability to deliver SI projects in Government and emerging sectors involving our 3DEXPERIENCE platform. These sectors are challenging and customers are increasingly looking for new multilayer ways to optimize their technology, business processes and infrastructure investments."

Infor Names Mayumi Hiramatsu Senior Vice President of Cloud Operations

6 July 2017

Infor today announced it has hired cloud expert Mayumi Hiramatsu in a newly created role, senior vice president of Cloud Operations. Hiramatsu, who reports to Infor CEO Charles Phillips, joins as Infor is experiencing high growth in its global cloud business.

"Infor has built one of the largest cloud companies delivering business applications as a service and that business now represents the large majority of our new sales and customers," said Phillips. "Mayumi's leadership and deep cloud pedigree and experience will help ensure optimal support for our cloud customers."

In this new role, Hiramatsu is responsible for providing direction and leadership for automation, scalability, security, and self service capabilities for Infor's cloud organization. Hiramatsu brings over 10 years of cloud experience delivering and operating cloud at companies including Cisco Systems, Autodesk and Microsoft. Prior to joining Infor, Hiramatsu was VP of Product Operations at Cisco Systems, where she was accountable for life cycle management of a large line of business, including IoT and security, which helped drive Cisco's transition to recurring revenue. She was also in charge of Cisco's digital product operational enablement of NPI, PaaS, and IaaS management. Before joining Cisco, she was VP of Cloud Operations and Product Security at Autodesk and helped Autodesk's transition from on-premise software to cloud.

Hiramatsu shares Infor and Phillips's commitment to STEM education and diversity, and will work to

further expand the company's efforts to arm the next generation with critical new economy skills and increase minority representation in technology. Hiramatsu is a board member of GirlsInTech, a nonprofit focused on the engagement, education and empowerment of girls and women who are passionate about technology.

In 2016 Hiramatsu took part in Fortune's Most Powerful Women NextGen Summit and was named one of Connect World's 2017 Women of M2M/IoT last month. A native of Japan, Hiramatsu started her career as a software developer at Charles Schwab and holds a degree from the University of California, Berkeley.

⬆️*Click here to return to Contents*

Lectra, ESTIA, the Today Tomorrow Textiles Foundation and JPS Conseil launch the 'Biarritz Active Lifestyle Integral' Chair

5 July 2017

Lectra, l'École supérieure des technologies industrielles avancées (ESTIA), the Today Tomorrow Textiles Foundation, and JPS Conseil announce the creation of the 'Biarritz Active Lifestyle Integral' Chair dedicated to tomorrow's innovative and sustainable materials.

Over three years, this new Chair aims to help the fashion industry's eco-system-from textile design to clothing sales-transform challenges coming from new ways of living and consuming into economic opportunities.

"How to find and develop sustainable materials which will open up new markets for companies in the sector? Which technologies to invent to make the most of these new materials? How to organize the factory of the future to meet new consumer expectations, such as customization? It's an entire economy that we aim to develop around emerging industries," explains Jean-Pierre Mocho, the founder of JPS Conseil and former President of the French federation for women's ready-to-wear. "There are many opportunities to seize, on condition that all the players, both old and new, work together."

To help textile and apparel companies to innovate, the Chair will combine knowledge sharing with open innovation. In particular, a technical training facility will adapt and pass on material-related savoir-faire.

"This Chair will help us to better understand the changes that are necessary in the sector, to anticipate innovations and to circulate knowledge worldwide," underlines Patxi Elissalde, director, ESTIA. "Based in Biarritz and founded with a long-term vision, this Chair will dive into user behaviors, materials and components, manufacturing technologies and services, the digitalization of processes, and the distribution of products, from clothes to accessories."

This approach will also foster interactions between different professions in order to stimulate creativity. Inspired by overarching principles in the collaborative and circular economy, the Chair also aims to capitalize on advances in research, from frugal or disruptive innovation.

"The environmental dimension is primordial," adds Pascal Denizart, managing director of the European Center for Innovative Textiles (CETI) and administrator of the Today Tomorrow Textiles Foundation. "Textiles and materials of the future must anticipate and accompany changes in lifestyles and consumption patterns. Added value from fashion will be tomorrow's sustainable materials."

Founders of the Chair favor open innovation initiatives. "The Chair's philosophy is founded on industrial partnerships across diverse sectors, notably in luxury and lifestyle, as well as partnerships with

international academia. The best way to move forward is to always work together!" concludes Daniel Harari, Lectra CEO.

⬆️*Click here to return to Contents*

Modelon's Growing Global Footprint

5 July 2017

Modelon is pleased to announce the expansion of its worldwide operations with the opening of a new subsidiary, Modelon Engineering Private Limited. Based in Tiruchirappalli, India, Modelon's team, led by Managing Director, Anand Pitchaikani, will support the growing demand in the region for systems modeling and simulation.

"Modelon's worldwide business has grown rapidly and the selection for global office placement has been strategic," says Magnus Gafvert, Chief Executive Officer. "Our focus is on connecting excellent teams with innovative customers. Opening a subsidiary in India, under Anand's leadership, is a major strategic initiative - bringing us closer to our growing and engaged customer base."

Modelon India will focus on:

- Serving customers in the Indian market with a committed full-time local team of system simulation experts;

- Accelerating the adoption of Modelon's simulation software solutions, including: training, support and consulting services;

- Augmenting Modelon's global R&D and consulting teams with localized engineering experts who recognize and understand client needs; and

- Employing top engineering competence from the Indian talent pool.

"The need for simulations in engineering activity is continuing to grow and advance rapidly in India" says Anand Pitchaikani, Managing Director. "My goal is to grow our footprint within India by creating a strong and loyal user base that trusts our experts and solutions. We are committed to building excellence in solutions and teams for simulation based system designs needed to serve any client."

Anand Pitchaikani has been working in systems modeling and simulation for the past 16 years and has been working with Modelon technologies as a consultant since early 2015.

⬆️*Click here to return to Contents*

SAP Names Scott Russell President of SAP Asia Pacific Japan

2 July 2017

SAP SE announced that Scott Russell has been appointed president of SAP Asia Pacific Japan (APJ).

In his new role, Scott will be responsible for growing SAP's business and presence in the APJ region, including Australia/New Zealand, Japan, Korea, the Indian subcontinent and Southeast Asia. He brings more than 20 years of experience in management, technology and consulting to this role.

"Our customers are looking to SAP for a vision of their digital future and for flexibility and choice in the

way they consume technology," said Jennifer Morgan, SAP Executive Board Member and president, Americas and Asia Pacific Japan. "In a region as diverse as APJ, the opportunity has never been bigger for SAP to continue to transform our customers' businesses and help them grow and thrive in the 21st century economy. Scott's vision and commitment to the customer, together with his impressive technology background and leadership experience, make him the right leader to help write the next chapter of SAP APJ's growth and innovation story."

Scott was previously president and managing director for SAP Southeast Asia (SEA). He was instrumental in driving strategy, operations and sustainable growth for SAP across Singapore, Malaysia, Thailand, Indonesia, the Philippines, Vietnam and other emerging markets in SEA. Between 2014 and 2016, he was the chief operating officer (COO) for SAP in APJ. In this role, he was responsible for providing leadership and direction to SAP's multifunctional sales and operations organizations, driving productivity improvements and significantly contributing to the achievement of revenue and profitability targets. Prior to the APJ COO role, he was senior vice president of SAP APJ Services. Before joining SAP, Scott was a managing consultant at PricewaterhouseCoopers and led the Systems Integration and Application Maintenance business for IBM Australia New Zealand.

"SAP is an innovation-driven company that has helped enterprises and small and midsize businesses digitalize and simplify, and our innovation is inspired by our vision to help the world run better and improve people's lives," said Russell. "The fourth industrial revolution has created unprecedented opportunity to fundamentally improve the state of Asia — across society, the economy and the environment. By infusing our innovation into our purpose, SAP's innovative solutions, built on SAP HANA and in the cloud, empower private and public organizations in Asia Pacific to become sustainable digital businesses."

He continued, "I am honored to lead the APJ business and to help create long-term value by addressing customers' current and future needs with our end-to-end industry solutions."

Scott succeeds Adaire Fox-Martin, who held the position of president of SAP APJ from February 2014 to April 2017. Adaire was recently promoted to the SAP Executive Board and together with Jennifer Morgan leads Global Customer Operations. Adaire oversees the SAP business in Europe, Middle East, Africa and Greater China.

For more information, visit the SAP News Center.

Click here to return to Contents

Events News

CGTech to Exhibit VERICUT Software Version 8.1 at WESTEC

6 July 2017

CGTech will demonstrate their newest version of VERICUT 8.1, CNC machine simulation, verification and optimization software at WESTEC in Los Angeles, Sept. 12-14, in Booth 1927.

In VERICUT 8.1, a new Additive Manufacturing (AM) module has been employed, along with enhanced support for Force™ optimization, Workpiece Sectioning, X-Caliper measurement tool, Report template, and Grinding and Dressing operations.

New Module: Additive

VERICUT's Additive module simulates both additive and traditional machining capabilities used in any order on hybrid CNC machines. Simulating both operations can identify potential problems that can occur when integrating additive methods. The user can access detailed "history" stored with VERICUT's unique droplet technology, which saves programmers time by quickly identifying the source of errors, in most cases using a single mouse-click.

This Additive capability checks: accurate laser cladding and material deposition, detects collisions between the machine and additive part, and finds errors, voids, and misplaced material. For the highest accuracy, VERICUT simulates the post-processed NC code that will be used to drive the CNC machine, and ensures proper usage of AM functions and laser parameters. Users can virtually experiment with combining additive and metal removal processes to determine optimal safe hybrid manufacturing methods.

"Additive Manufacturing applications create new possibilities for manufacturers," said Gene Granata, VERICUT Product Manager. "Adding this technology to VERICUT provides unique solutions that address the needs of our customers in the rapidly expanding AM market."

Click here to return to Contents

IoT Solutions World Congress to Host its Biggest Edition

5 July 2017

The third edition of the Internet of Things Solutions World Congress (IOTSWC) which will take place on 3-5 October at Fira de Barcelona's Gran Via venue will be the biggest ever. As part of the Barcelona Industry Week, the leading global event on industrial Internet of Things (IIoT) will bring together over 220 companies and 250 international experts to discuss and showcase the latest products and applications of this disruptive technology that will change the business models in many industries and is already increasing production through automated processes.

The Congress program will feature 8 tracks -Manufacturing, Utilities, Connected Transport, Healthcare, Buildings & Infrastructure, Open Industry, Blockchain and Quantum Computing- and will tackle some of the key challenges companies around the world are facing in an ever-growing digitalized world to help them seize the full potential and benefits IoT solutions are bringing.

Among the key companies showcasing at IoTSWC 2017 are ABB, Accenture Digital, Analog Devices, Dell Technologies, Deloitte, Everis, Fiware, Harting, HBC, Honeywell, Huawei, Intel, IoT Works-HCL Technologies, Kaspersky, Microsoft, National Instruments, Optimal Plus, Orange, PTC, Red Hat, Schneider Electric, Sigfox, T-Systems, Tech Mahindra, Telefonica, Telit, Thales, Vodafone and Wipro.

In addition, IOTSWC will have a testbeds area for live demonstrations where companies and institutions will show the operation of 10 industrial internet applications developed by leading companies. These testbeds explore untested technologies or combinations of other technologies with the aim of creating products and services capable of generating new international standards.

Congress: Applied Knowledge

Among the confimed speakers are John Ellis, former Global Technologist and Head of the Ford Developer Program; Mikko Hypponen, Cybersecurity expert and Chief Research Officer at F-Secure Corporation; MiT Media Lab's Joe Paradiso, Professor of Media Arts and Sciences; and Joe Spagnoletti, Technology expert and former SVP and Chief Information Officer of the Campbell Soup Company.

Barcelona Industry Week

This year IoTSWC will be a part of the Barcelona Industry Week (BIW), one of the world's biggest trade fair platforms for industry both from a commercial and knowledge perspective, taking place on October 1-6. Hosted at Fira de Barcelona's Gran Via venue, the BIW will comprise several events: Expoquimia, Eurosurfas, Equiplast, IoTSWC, In(3D)ustry From Needs to Solutions, the World Congress of Chemical Engineering, the World Chemical Summit, and the Smart Chemistry, Smart Future event.

⬆️*Click here to return to Contents*

OpenText Announces Accenture Interactive, Deloitte, SAP and Tata Consultancy Services as Diamond Sponsors at OpenText Enterprise World 2017

7 July 2017

OpenText™ today announced Accenture Interactive, Deloitte, SAP and Tata Consultancy Services (TCS) as the Diamond sponsors of OpenText Enterprise World 2017, hosted at the Metro Toronto Convention Centre from July 11-13. OpenText welcomes guests to its 19th annual conference to explore the digital and Artificial Intelligence (AI) trends that will define the future of business.

This year's OpenText Enterprise World 2017 Diamond sponsors will host a variety of activities throughout the conference, including:

- Accenture Interactive: Accenture Interactive helps the world's leading brands transform their customer experiences across the entire customer journey. Through connected offerings in design, marketing, content and commerce, Accenture Interactive creates new ways to win in today's experience-led economy. The breakout sessions will highlight how Accenture Interactive helps clients address marketplace disruption by focusing on the content and creative lifecycle. The sessions will explore taking a holistic approach to developing a global content program that leverages technology and tools to create intuitive user experiences.

- Deloitte Digital: Deloitte Digital has created a new model for a new age – a creative digital consultancy that combines technology capabilities with informed industry insights to transform our clients' businesses. Together, Deloitte Digital and OpenText are disrupting the digital experience by helping clients to improve how they deliver, analyze, track, and manage relevant content across multiple channels. At Enterprise World, Deloitte Digital will showcase how they've helped clients create dynamic experiences utilizing OpenText technologies – from transforming the customer experience with Exstream to creating more personalized web experiences with OpenText DAM.

- SAP, an OpenText partner, will host roundtable luncheons where registered attendees can hear business transformation stories from customers who have implemented SAP® and OpenText solutions. The attendees will also have the opportunity to learn about the OpenText solutions that run with SAP software through a number of breakout sessions. Additionally, representatives at an SAP booth will provide in-depth information about SAP Hybris® digital commerce solutions.

- Tata Consultancy Services: TCS has over two decades of rich experience in implementing a wide range of enterprise content management solutions on OpenText products (including those acquired by OpenText). These solutions have been deployed for more than 500 projects across various industries and geographies energizing enterprises in their digital journey. TCS, an

exclusive sponsor of the closing night celebrations featuring a private performance by Canada's Walk off the Earth band, will maximize its participation to jointly explore business growth opportunities with Open Text. TCS will present two breakout sessions elaborating best practices on content-process integration for improving enterprise efficiency and customer experience management for the digital future.

"I am delighted to welcome Accenture Interactive, Deloitte, SAP and TCS to our home in Canada, as lead sponsors of Enterprise World," said Adam Howatson, CMO at OpenText. "OpenText's strategic relationships with industry leaders add to the strength of our brand, and to our ability to be trusted partners for our customers. We are honored by these strong and long-lasting global partnerships, and together, we have created a truly unique conference."

⬆️*Click here to return to Contents*

Implementation Investments

American Airlines Embarks on Global Cloud Transformation with IBM

27 June 2017

IBM today announced that American Airlines will use IBM Cloud as the foundation for a massive cloud transformation designed to make internal processes more efficient, faster, easier and adaptable to better handle site traffic during high volume periods.

Building on the strategic cloud partnership signed with IBM in 2016, American Airlines will migrate to the IBM Cloud a portion of its critical applications, including aa.com, its customer-facing mobile app and its global network of check-in kiosks. In addition, other workloads and tools, such as the company's Cargo customer website, will also be moved to the IBM Cloud.

"In selecting the right cloud partner for American, we wanted to ensure the provider would be a champion of Cloud Foundry and open-source technologies so we don't get locked down by proprietary solutions" said Daniel Henry, American's Vice President Customer Technology and Enterprise Architecture. "We also wanted a partner that would offer us the agility to innovate at the organizational and process levels and have deep industry expertise with security at its core. We feel confident that IBM is the right long-term partner to not only provide the public cloud platform, but also enable our delivery transformation."

As part of the solution, American and IBM will work together to move critical applications to the IBM Cloud. In parallel, the two companies have teamed to rewrite these applications to the IBM Cloud Platform as a Service (PaaS), and establish a cloud-native architecture. As part of this process, American will work with IBM Global Services to leverage IBM's Garage Methodology of creating innovative applications quickly through a micro-services architecture, design thinking, agile methodology, DevOps, and lean development.

IBM Cloud will help enable developers to quickly build and change application functionalities for the airline's customers. These customer-facing systems will be on the IBM Public Cloud, while American maintains backend connectivity to other on-premise legacy and third-party systems, for true Hybrid Cloud functionality.

"American Airlines is embracing IBM Cloud as a true business enabler to lead the way in innovative customer experiences," said David Kenny, Senior Vice President, IBM Watson and Cloud Platform. "It

is the foundation of American's digital transformation and enables the airline to take its delivery speed to the next level with increased scalability, performance and agility to transform business processes and customer experiences at the same time."

Click here to return to Contents

Centric Software Signs First Portuguese Customer, Sonae

6 July 2017

Centric Software announces that Sonae Sports & Fashion, a division of the Portugal-based multinational company Sonae, has selected Centric Software to provide its product lifecycle management (PLM) solution.

Sonae is a multinational company managing a diversified portfolio of businesses in retail, financial services, technology, shopping centres and telecommunications. The division of Sonae Sports & Fashion comprehends seven brands, from fashion to sports and outdoor lifestyle, with international reach, through organic and franchised stores, single points of sale and e-commerce.

According to Margarida Nascimento, Head of Product at Zippy, Sonae Sports & Fashion began the search for a PLM solution to replace multiple applications and in-house systems with a goal of reducing complexity improve team collaboration and speed time to market.

"We want a shared and centralized platform that will allow easy online access to real time and accurate information, thus reducing rework activities and mistakes," Margarida Nascimento explains. "Improving collaboration is an important business challenge for us. We are looking for better communication between teams, both internally and with vendors, such as a way to link each brand sourcing team with central sourcing teams and local Asian offices to align processes, information and communication."

"We decided to undertake a PLM project to completely transform product information by integrating people, data, processes and business systems across the whole lifecycle. We are streamlining the way products reach the market," continues Margarida Nascimento.

"Ultimately, the aim is to speed time to market and reduce collection development lead time by adopting lean processes and cutting the time spent on administration thus, being able to make competitive purchasing choices by taking advantage of the synergies within a centralized system is crucial. We also wanted to concentrate our supplier and factory management, including factory quality control, within PLM."

Following a competitive selection process, Sonae chose to implement Centric Software's PLM solution.

According to Goska Wolañska, Head of Operations at Losan, "We evaluated several PLM solutions in the market, but Centric came out on top in terms of sourcing and ordering processes, usability, flexibility and technical assessment."

"Centric had the best score in the functional areas we needed; a higher ability to self-evolve the PLM solution, due to its configurable approach; the largest customer base of fashion and sports retailers; and a single focus on the fashion industry, while other vendors provide complementary solutions."

As Goska Wolañska says, "We expect that our Centric PLM project will help us improve our product design and quality, shorten review and approval lead times and reduce rework. This should result in a faster time to market, enhance visibility and increase profitability."

"During the sales process, the Centric team was highly proactive and responsive to our queries and demonstrated a deep knowledge of product lifecycle management processes and best practices," concludes Goska Wolañska. "We are looking forward to working with Centric as we build foundations to address our business challenges. We anticipate building a strong and long lasting partnership that can foster the growth of both our companies."

"We are very excited to welcome Sonae on board as our first customer based in Portugal and our 100th customer in Europe," says Chris Groves, President and CEO of Centric Software. "The Sonae Group is a company with worldwide reach and we are pleased to partner with them on a diverse collection of brands in Sonae's sports and fashion division."

⬆️*Click here to return to Contents*

Chevalier Implements Gerber Technology's YuniquePLM® Cloud Software as a Complete Solution to Growing Demands within Their Company

6 July 2017

The fashion industry is constantly growing and evolving, with quick turnaround and high quality expected at all times. To keep up with growing demands, Chevalier implemented Gerber Technology's solution, YuniquePLM® Cloud.

Chevalier is a Swedish manufacturer of high-quality hunting clothes. They have been developing hunting clothes since 1950 and have always prided themselves on quality and genuine craftsmanship. Their work has led to more and more people using their products for more than just hunting, and Chevalier has become a lifestyle brand for many hunters. Today they develop and design new products continually to meet all requirements and preferences for both the classical and modern hunters.

"One of Chevalier's biggest challenges was gaining ownership of all information relating to their products," said Bill Brewster, vice president and general manager, enterprise software solutions for Gerber Technology. "With YuniquePLM Cloud, all dates can be centralized and then easily shared with suppliers."

YuniquePLM Cloud will not only reduce complexity in day-to-day operations for Chevalier, but will allow for a smoother workflow and more communication through every step of their process. Simplified sharing of information with suppliers contributes to higher efficiency and faster throughput.

"The YuniquePLM Cloud solution is the complete system that we need as a business. It will allow us to stay on top of our increasing needs and further integrate, thus speeding our time to market," said John Lind, managing director of Chevalier Sweden AB.

⬆️*Click here to return to Contents*

Product News

Hexagon Manufacturing Intelligence Introduces Optical Scanning System for the Aerospace Sector

5 July 2017

Hexagon Manufacturing Intelligence today launched GLOBAL Advantage HTA (High Throughput and Accuracy), an enhanced metrology solution for the aerospace industry.

Increased production demand for higher performance aircraft engines spurred the design of the new GLOBAL Advantage HTA measurement solution for compressor blades. The technology-driven, high-accuracy measurement system is tailored to provide a step-change improvement in measurement throughput, while delivering high-density measurement data for enhanced aerofoil geometry analysis.

The GLOBAL Advantage HTA Platform is based on Hexagon's advanced HP-O Multi optical scanning probe technology for high-speed non-contact measurement of aero- and land-based compressor blades in shop-floor environments. Utilising frequency-modulated laser interferometry technology, GLOBAL Advantage HTA provides rapid non-contact scanning at single-micron uncertainty to verify blade characteristics including aerofoil, platform, root, shroud and other features. Highly-polished blade surfaces are easily measured, without the need for the secondary coating and cleaning operations required for many non-contact technologies. Using BladeSmart inspection software from Hexagon, the GLOBAL Advantage HTA solution includes an execution command library containing aerofoil, platform and root geometry methods, allowing users to create and deploy measurement programs faster.

"The rigorous demands of increased engine production and the growing trend for shop-floor inspection paved the way for the GLOBAL Advantage HTA, the first comprehensive solution specific to blade inspection," states Michael Mariani, Director of Strategic Business Development, Hexagon Manufacturing Intelligence North America. "The GLOBAL Advantage HTA technology integrates seamlessly into the manufacturing engineering and production operations of aeroengine manufacturers. More importantly, this high-precision metrology solution meets the throughput and flexibility requirements of today's aerospace industry."

The GLOBAL Advantage HTA is available to order worldwide now; more information is available from local Hexagon commercial operations and dealers.

[⬆]*Click here to return to Contents*

IBM and Lightbend Build Integrated Platform for Cognitive Development

28 June 2017

IBM today is announcing a collaborative development initiative with Lightbend, the provider of the world's leading Reactive Application Development Platform, to help advance the development of artificial intelligence (AI) and cognitive solutions in the enterprise. The resulting joint solutions will be designed to provide a complete toolchain for Java and Scala developers to easily build and deploy AI and cognitive applications in both on-premise and cloud environments.

Developers are turning to Scala for their most complex use cases due its ability to handle streaming data and massive scale. Scala is the language of cognitive development. Modern frameworks such as Spark, Kafka and Akka are written in Scala. The confluence of data volume and the introduction of cognitive/AI technologies is increasing both opportunity and complexity for developers building enterprise applications in the new era of cognitive computing.

Lightbend's popular Reactive Platform is powered by an open source core and brings developers important capabilities across reactive programming, data and microservices. IBM will integrate these capabilities across its cloud platform and portfolio of cloud services, including data analytics, cognitive and machine learning, and collaborative data science tools, which will be designed to extend new capabilities to Java and Scala communities. Developers across enterprises and startups will be able to

take advantage of the latest cognitive and AI technologies and to leverage existing WebSphere investments.

"Working with IBM on an integrated platform for cognitive development is a natural progression of our work to support advanced cognitive application development. As one of the leaders in cognitive/AI, IBM brings important code and tools to our customers and the Java and Scala communities," said Mark Brewer, President and CEO, Lightbend. "IBM's support of Lightbend and the Reactive Platform is a validation of where we think cognitive development is going and what is required by the developers building that future."

Bob Lord, IBM's Chief Digital Officer added, "We believe the use of the Lightbend Reactive Platform is essential to building today's modern infrastructures. Lightbend represents IBM's continuous commitment to the Java and Scala communities. Java and Scala are the languages of cognitive and AI development, and cognitive development is the future. The collaboration between IBM and Lightbend can help enterprise developers build cognitive applications and accelerate the era of cognitive computing."

IBM has a long history supporting the millions of developers in the Java and Scala communities. IBM spearheaded the creation of an open environment and open tools for Java developers, which resulted in Eclipse and then the Eclipse Foundation. It has also supported the 1.2 million developers in the Scala community for many years, including an ongoing collaboration with Lightbend that has trained hundreds of Scala developers. IBM and Lightbend consider Scala among today's most popular programming languages with major uses at Apple, Verizon, Twitter and more.

The strategic collaboration between IBM and Lightbend will create new code, tools and documentation that will be designed to help developers build Java- and Scala-based applications on the Lightbend Reactive Platform. It is anticipated to integrate WebSphere and key offerings across IBM Cloud, including app management services, the Watson Data Platform and the more than 150 services across cognitive intelligence, data analytics, Internet of Things, security, DevOps, and blockchain available to developers through the IBM Cloud. IBM and Lightbend have a history of collaboration but this strategic investment and relationship will allow enterprise developers to both reap the benefits of the Lightbend Reactive Platform while integrating IBM's cognitive development tools, resources and support.

The Lightbend Reactive Platform is projected to be available in the coming weeks through IBM's Cloud as an integrated bundled solution with WebSphere Application Server.

IronCAD Announces Multiphysics Analysis Update for IronCAD 2017 Product Update #1

29 June 2017

IronCAD announced a major update to Multiphysics for IronCAD (MPIC), a seamlessly integrated multiphysics simulation tool for IRONCAD that provides fully coupled multiphysics for stress, thermal, electrostatic and fluid analysis. This major update includes new patented Extended Markup Language Data (XMD) technology, which represents a huge technology leap in encapsulating model data and provides easily expanding analysis features for advanced XMD design analysis tools.

Several other enhancements to MPIC include:

- Updated unit system for flexible customization to accommodate different industries with single-button control.

- The existing moving-least-squares (MLS) FE tying has been further refined to automatically detect the intended/unintended small gaps/overlap of parts in large assembly analysis without requiring laborious geometry modifications.

- Analysis report improvements that include direct links for easy review.

IronCAD customers will also benefit from new automatic parts contact/impact analysis as the default setting has been refined specifically to help CAD users solve general mechanical contact/impact problems. As shown in the pictures below, many complex contact analyses such as deep drawing or stamping springback problems now can be done using the default setting.

Stamping and springback prediction is a difficult problem even for experienced analysts. The deep-draw model is done with the minimum mesh density while preserving the physics of the stamping process. The first model (Case #1) here demonstrates an unsuccessful case where the sheet metal was not fully constrained and the stamping process produced an unwanted shape. When a sheet is properly constrained, the desired stamped shape is produced (Case #2). In such high nonlinear process, the material parameters, proper metal plasticity, yield information, and robust kinematic hardening control are critical to correctly describing the Bauschinger effect in the springback behavior.

"Multiphysics for IronCAD continues to address the needs of mechanical CAD users by offering simulation to more users earlier in the design process," stated Cary O'Connor, Vice President of Marketing at IronCAD. "The latest release of MPIC makes it even easier for assembly analysis to be applied in designs. Our customers will welcome these additional improvements and the other new advances offered by MPIC."

MPIC capabilities — including stress, thermal, electrostatic and fluids — are included in the IronCAD free 30-day trial, allowing for full evaluation, and then continue to function as a node-limited design validation tool. Even though it is node-limited, MPIC's strain-enriched finite element analysis technology SefeaTM gives users capabilities to test their products at lower mesh levels. SefeaTM is the newest enriched finite element formulation developed specifically for CAD design simulation using automatic four-node tetrahedron elements commonly used in CAD simulation. It achieves the same accuracy as second-order elements but is more robust, without mid-side-node noise, and requires a much lower computing cost.

Multiphysics for IronCAD is available immediately for download.

Click here to return to Contents

Sopheon Introduces New Analytics Capabilities for Improved Business Forecasting Accuracy and Predictability

6 July 2017

Sopheon today released the latest version of its Accolade®Enterprise Innovation Management (EIM) solution.

'Good' decisions are based on the availability of 'good' information − having meaningful, trusted and current data at your fingertips at the moment you need it. Business leaders driving decision-centric processes should be drawing on comprehensive information that is generated internally as well as gathered from outside the company. Sopheon has long focused on surfacing relevant and timely information to support better, faster decisions; with the release of Accolade version 11.2, Sopheon offers a new analytic and knowledge discovery capability to more proactively manage risk and create

breakthrough innovations with greater efficiency. The new capability – named Accolade Insights – offers a range of benefits.

Further Connecting the Enterprise

Speed to informed decisions, critical in a fast-moving, digital business environment, depends on data that is timely, accurate, situationally aware and actionable. Accolade Insights automatically leverages and connects internal and external data sources to proactively consolidate and serve up intellectual 'assets' at the point a decision needs to be made. These assets include relevant experts and expertise, learnings from past work, and external macroeconomic changes impacting the critical assumptions underpinning business forecasts and key performance indicators.

Preempting Risk & Improving Accuracy of Business Forecasts

Accolade Insights was designed to help companies leverage internal data in combination with macroeconomic and other external factors for real-time monitoring of the health status of products, portfolios and projects, including the business case assumptions impacting accuracy of revenue and profit forecasts. This is equally applicable to the management of new product introductions, in-market products, product lines and market segments.

When shown a preview of this functionality, a $14 billion industrial manufacturing customer stated: "Some time ago we had what we thought was a great innovation, but the macroeconomics shifted in the middle of our product development cycle. In the end we went to market with a product that failed because we didn't proactively adjust to the shift. Had I had this early visibility of the business case impact of the market dynamics, it would have saved us millions of dollars."

Stimulating Innovation & Improving Efficiency through Proactive Knowledge Reuse

Many companies encounter redundancy of innovation effort. They waste time and money on duplicating work that has been done before; recreating experience that has been 'lost' when key employees have left; repeating the same mistakes project after project because lessons learned are not codified and shared; or not being aware of technology or other developments that could be reused to shorten the time required to develop breakthrough innovations. The pain associated with this becomes more pronounced with the increase in number of millennials in the workplace and their expectations for transparency and access, as well as the trend for companies to rotate knowledge workers across jobs and roles on a regular basis to stimulate employee engagement, which is regularly rated as a top concern for CEOs in this digital era.

The Accolade software automatically captures cross-functional work activity and work product, which become rich assets for reuse. Accolade Insights leverages patented search methodology to tap into this legacy knowledge, work product and experience to introduce project leaders and team members to past work and people in the organization who are either subject matter experts or who have navigated a similar work path before. This enables more efficient collaboration by serving up existing technologies, process, learnings and documents for reuse.

One long-standing Sopheon customer proudly relates how a breakthrough technology developed by a packaging business unit to retain freshness in potato chip bags was successfully reused for two entirely different applications by a separate division, generating millions in new revenue. The 'discovery' of the technology that was reused was enabled through Accolade.

Theorem's latest Visualize 3D product for SolidWorks - JT supports SolidWorks 2016

28 June 2017

We are pleased to announce the release of the latest version of our Visualize 3D SolidWorks-JT product.

V19.4 supports SolidWorks 2014, 2015 and 2016 along with Jtk 8.0.0.

Our Visualize 3D products are aimed at creating visualization data for users of digital mock-up, virtual reality or desktop applications.

Using JT with additional 3D PMI data as part of a Model Based Definition process allows the user to reduce the overall design costs associated with the creation of conventional 2D drawings.

Sharing SolidWorks data using the neutral ISO standard JT format allows organisations to protect the intellectual property of their designs while allowing users to explore the shape, and more easily understand the 3D definition. The IP protection can be enhanced by restricting the JT representation to be tessellated data only.

Enabling SolidWorks users to create high quality JT files enables them to share JT data with their customers and suppliers, facilitating collaboration.

SolidWorks and JT data can now be further utilised in Augmented, Mixed and Virtual Reality by using our Visualization Experiences App for Digital Realities.

Our strategic partnerships with Dassault Systemes and Siemens ensures that there is parallel development between the latest releases of SolidWorks, JT, and Theorem's Visualize 3D products, allowing us to continue to provide data solutions for SolidWorks users wanting to create JT data.

Click here to return to Contents

T-Systems, Dassault Systèmes and Fujitsu Launch Groundbreaking New PLM Solution to South African Market

5 July 2017

Information and communication technology (ICT) service provider, T-Systems South Africa, have extended their partnership with Dassault Systèmes into the South African market. In looking for a disruptive approach to the market, ICT company Fujitsu South Africa, have brought their Industrial Kiosk to the partnership, which will bring a revolutionary approach to PLM that caters to the rugged environments and heavy demands of the industrial sector. These solutions launched officially at the Dassault Systèmes "Innovate the Future" event held at T-Systems in Midrand on the 4th July 2017.

The combination of Dassault Systèmes' unique 3DExperience Platform with Fujitsu's industrial computer kiosks with built-in track pads and palm vein user authentication, all neatly packaged as part of T-Systems' extensive value-added solution, result in a unique end to end PLM products and services offering. With this partnership, T-Systems and Dassault Systèmes plan to offer Dassault Systèmes' 3dExperience Platform from the cloud, a first in the PLM space in South Africa. In addition, T-Systems will make access to High Performance Computing available to the local market. Touted as the first real "Simulation-as-a-Service" offering in South Africa, the disruptive, cloud-based solution aims to make PLM accessible to the South African engineering and manufacturing industry.

 Currently aimed to solve the problems of managing design and product simulation, the paperless

solutions enable organisations to manage their products and services from design and engineering to the customer environment – making it ideal for the needs of the automotive and manufacturing industries, as well as other sectors of the economy, from the financial sector to Smart City programmes. The solutions promise to eradicate problems typically associated with traditional processes, such as damage and loss of paper-based designs, complex change tracking and repetitive hardware repairs and replacements due to the rugged environment of an industrial area.

"The planning, design and management of products or services will become a whole lot simpler and easier to manage with these PLM solutions," says Michael Frans, Head of Business Development and Strategy for Automotive and Manufacturing Industries at T-Systems. "Users will be able to use the software easily, and take advantage of true collaboration across organisations. In the production areas, using the Fujitsu kiosk's system, production staff will be able to view the current build instructions, and important production information. These solutions mean that the time spent on design, redesign and fine tuning a product or service is reduced, while records of changes are able to be stored and managed."

According to Natasha Sampson, Partner Acquisition and Partner Success Manager, Dassault Systèmes, South Africa is ripe for solutions addressing end-to-end business processes. "We believe that South Africa is a growing market with businesses that are beginning to recognise the value in the use of virtual applications to remain a step ahead of competition. We are strongly invested in South Africa – a common thread between ourselves and both T-Systems and Fujitsu – and are proud of an innovation of this disruptive scale emerging from these shores."

T-Systems' Managing Director, Gert Schoonbee, seconds this belief, saying, "At T-Systems, we have long been believers in developing, growing and retaining local talent within South Africa, and the market disruption that this solution promises to bring about is yet another way that we, as a nation, are proving to be at the forefront of technology. T-Systems, Dassault Systèmes and Fujitsu all have local presence within South Africa, and as such, we are best positioned to service the local market."

Steven Kramer, Channel & Marketing Manager: ESA at Fujitsu, says of the partnership, "We see value in real partnerships, such as this one which brings a unique PLM offering to market. Dassault Systèmes has a fantastic software solution, Fujitsu has a hardware offering that is uniquely suited to launch the software solution, and T-Systems has the knowledge, experience and cloud platform to link it all together and offer it as an end-to-end solution, including Fujitsu Servers and server platforms as needed by customers. The combination of our abilities and strengths will enable us to pave the way for new opportunities as we identify new problems we can solve – the possibilities are endless."

Click here to return to Contents