

PLM Weekly Summary

Editor: CIMdata News Team

08 November 2019

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CIMdata News

CIMdata to Host Free Webinar on The State of the PLM Economy

07 November 2019

CIMdata, Inc., the leading global PLM strategic management consulting and research firm, announces an upcoming free educational webinar, "The State of the PLM Economy." The webinar will take place on Thursday, December 12, 2019 at 11:00 a.m. (EST) and will last for one hour.

If there is one constant in the "PLM Economy", i.e., the collection of software and service providers that serve industrial companies in pursuing their PLM strategies, it is that it is never boring. In this webinar, Stan Przybylinski, CIMdata's Vice President, will review the major events in the PLM Economy in 2019 and discuss what we might look forward to in 2020 and beyond.

This webinar will help attendees:

Develop a better understanding of the events of the calendar year 2019 and how they are impacting the market.

Identify key aspects of market moves that might suggest future actions.

Better understand the PLM market and the competitive position of the leading PLM solution providers.

Get a quick update on market changes that would take hours to document and understand without CIMdata's help.

Get CIMdata's take on market actions to supplement internal opinions.

According to webinar host Stan Przybylinski, "The PLM Economy grew faster in 2018 that we had forecast, and the market has remained strong through 2019. The pace of mergers & acquisitions (M&A) has continued. It can be hard to follow, one of the reasons why people have come to value CIMdata's work and opinion on this dynamic marketplace. This webinar will provide a "one stop shop" for information about the PLM market in calendar year 2019."

Mr. Przybylinski has over 30 years of experience in the development of business-enabling IT solutions for research, engineering, and manufacturing organizations worldwide. He has worked in R&D, marketing, and communications with both Fortune 100 companies and small organizations. Stan is responsible for CIMdata's research agenda, including the CIMdata PLM Market Analysis Report series. He has been directly involved with the selection, consulting, integration, and implementation of large-scale PLM solutions, and has worked on projects for both PLM solution providers and end-user organizations in the automotive, aerospace, consumer packaged goods, high-tech, and medical devices industries. He has spoken on PLM-related topics in Europe, North America, and Asia.

This webinar will be useful to product planners and managers, product portfolio managers, PLM team leaders and team members, PLM users, executives interested in a quick way to update themselves on the PLM economy, product managers, IT leaders, solution providers, financial analysts, and anyone who wants to learn about how PLM has progressed in 2019 and how it might move forward in 2020 and beyond.

During the webinar attendees will have the opportunity to ask questions about the topics discussed. To find out more, visit: https://www.cimdata.com/en/education/educational-webinars/webinar-the-state-of-the-plm-economy-2019. To register for this webinar please visit:

https://register.gotowebinar.com/register/608969308515222275

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Configuring Market Success: VariSales from Variantum - CIMdata Commentary

06 November 2019

Key takeaways:

Global customers increasingly want products made just for them.

Configure-to-Order (CTO) and Engineer-to-Order (ETO) strategies can help industrial companies deliver on this requirement.

Many CTO and ETO companies struggle to ensure that quoted bids are actually profitable.

Configure-Price-Quote (CPQ) solutions emerged to address this important problem.

VariSales from Variantum, a global expert in product configuration and lifecycle management, builds on their strength in configuration management across the lifecycle from product definition through life.

Introduction

Manufacturing companies today face a complex, dynamic global market with competitors around every turn. Their customers increasingly demand products that are made just for them. To help meet this requirement, companies in varied industries rely on configure-to-order or engineer-to-order strategies to profitably deliver products to their customers.

Over the last several years, a new class of solutions has emerged to help companies enhance their ability to configure profitable products for their customers. Configure-Price-Quote solutions go beyond just configuration, using engineering and enterprise data to quickly develop profitable bids and solutions to customers' problems. This commentary focuses on a CPQ offering from Variantum, long known for their skills in lifecycle configuration: Variantum VariSales.

Research for this commentary was partially supported by Variantum.

Succeeding with Configure-Price-Quote

Over the centuries, products evolved from artisanal, produced uniquely or in small lots, to mass produced. Manufacturers evolved from vertical integration to leveraging supply chains and marketplaces to make their varied products. Today, companies face a complex, dynamic global market with competitors around every turn. These trends drove the German government to develop their Industry 4.0 vision, where all elements of the economy are "smart," and require the ability to configure value networks with "App store simplicity" to help manufacturers profitably serve markets of one. To reach this lofty vision, both products and manufacturing processes must be significantly more configurable.

Global customers increasingly demand products that are made just for them. Thus, many different industries rely on CTO or ETO strategies to profitably deliver products to their customers. Also, product companies increasingly want to mass customize their way to markets of one to meet customer demands.

Product configurators have long addressed these issues, some very technical and some targeted toward business users. But effectively using these solutions creates a number of requirements that some companies struggle to master. Configuration skills, costing accuracy, timeliness of quotes to customers, and well aligned manufacturing processes are essential to make it work. But, as in other disciplines, many of the supporting solutions are designed for domain experts, so not readily accessible to others in

the organization. In a recent study on advanced variant configuration management, CIMdata found that many large companies rely on Excel, email, and network drives to define and manage their configurations.

Over the last several years, CPQ solutions emerged to help companies enhance their ability to configure profitable products for their customers. CPQ solutions go beyond just configuration, using engineering and enterprise data to quickly develop profitable bids and distinctive solutions to customers' problems. They help give sales more control over the sales process, potentially eliminating pre-sales support, a big resource drain for many companies pursuing CTO/ETO strategies. CPQ solutions can also help bring new sales people up to speed more quickly and make them effective in new roles. CIMdata sees these capabilities as part of our product innovation platform definition. 1 We first investigated the CPQ segment in 2017 and revisited that assessment in early 2019. There are CPQ offerings focused on a wide range of industries, including energy and utilities, telecommunications, wood manufacturing, and others.

Variantum VariSales

Variantum, with headquarters in Espoo, Finland, specializes in designing and delivering an enterprise class product lifecycle management (PLM) enabling solution platform built from the ground up to support complex configurable products throughout their lifecycles. Variantum's focus has allowed their compact team to design and deliver their solution to over 50,000 users across 80 countries. Their stated mission is to "...help companies to become more customer centric with their offerings." 2 CIMdata recently published an eBook that provides significant detail on the company, their offerings, and customer successes.3

Because of their long-time focus on the full lifecycle, Variantum frames their solutions in terms of "offering management": redefining how products, services, and software are produced, sold as well as maintained. Essentially, offering management includes the full product lifecycle, including research and development, manufacturing, production, sales, and maintenance. Figure 1 highlights this commitment to offering software and services to help companies address their offering management challenges.

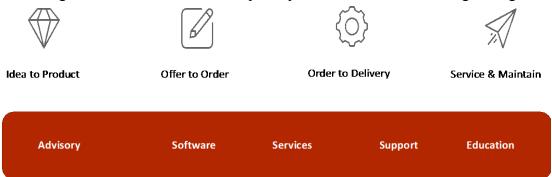


Figure 1–Variantum's Business Model (Courtesy of Variantum)

It is in this context that they offer VariSales, their entry into the CPQ market. This solution has been on the market for several years and the company is ramping up to better support expansion in the market. The company claims over 50,000 users, a number that is increasing. Variantum believes that basing their

¹ https://www.cimdata.com/en/resources/complimentary-reports-research/position-papers/item/8484-product-innovation-platforms-definition-their-role-in-the-enterprise-and-their-long-term-viability-position-paper

² Source: Variantum presentation

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³ For more information please see https://www.cimdata.com/en/news/item/11110-cimdata-publishes-ebook-mastering-complex-configurable-products-through-the-digital-thread

CPQ offering on the underpinnings of their product data management (PDM) solution makes their approach different from others in the CPQ market. CIMdata agrees with this assessment. This relationship between their solutions is highlighted in Figure 2. Most CPQ solutions focus on customer relationship management (CRM), an important part of the sales process to be sure. While this might be necessary, industry experience suggests that most companies struggle with configuration management skills, costing, and engineering-manufacturing collaboration. Variantum's work with global leaders like Kone, where they help the company configure and lifecycle manage their elevators and escalators, has helped provide crucial insights into the quoting problems of industrial manufacturers. Building this capability on top of VariPDM best leverages the configuration management capabilities for which Variantum is known

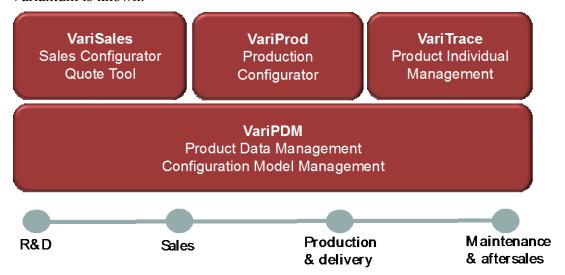


Figure 2–Variantum's Solutions (Courtesy of Variantum)

While VariSales was created as part of the Variantum product stack, companies do not need to use VariPDM for product model definition and management to benefit from their CPQ offering. There are alternatives. The product data models can be imported from any PDM system or VariSales can create the desired option and variant choices by importing this information via Microsoft Excel. Worksheets can be output from existing PDM/PLM solutions or built from scratch, which is all too common in CTO and ETO companies. This provides a lightweight alternative to modeling configurations using a PDM system. CIMdata believes that supporting companies with configurations from the extremely complex to simple is critical for market success, particularly for CPQ use cases. Costing information, essential to help CPQ users define buildable, profitable quotes for their customers and prospects, can be imported from enterprise resource planning (ERP) systems.

This information is used to populate and animate a sales configurator that can be used with most major Web browsers. The user interface (UI), shown in Figure 3, lets sales people in the field to rapidly configure buildable product offers. The total price of the evolving offer is updated with each change and shown in the lower left of the UI. Companies can also attach 3D viewable renderings to the configuration choices, with the product visualization updated in the right hand pane. This feature is offered by other CPQ solutions and can be very helpful to closing sales. Once the desired configuration is determined, Variantum's solution builds the product quote using standard text, sales conditions, pricing based on customer-specific discounts, and other needed information to support a customer's decision-making process.

Variantum is leveraging early success with their lead customers to define requirements and test features. KONE, a global leader in the elevators and escalators business, has been a long-time Variantum customer. They use Variantum solutions to digitize the order-to-delivery process, integrating it with their aftersales efforts, resulting in a significant improvement in their time-to-market and order-to-delivery process.4 Chiller Oy, a Finnish provider of heating, cooling, and energy applications, and Abloy, a leading manufacturers of locks, locking systems, and architectural hardware, report similar lifecycle benefits.5 As a result of their initial market entry, Variantum is also offering two VariSales product variants. A simplified version of VariSales is available for mass product customers' option lists, where the options lists are fairly simple but can benefit from CPQ. Variantum also offers VariCPQ, a product variant that leverages their configuration knowledge delivered on the Salesforce platform. They have an active VariCPQ beta program that is currently offered on the Salesforce AppExchange. Variantum is also planning industry-focused solutions that target other common CTO/ETO industries.

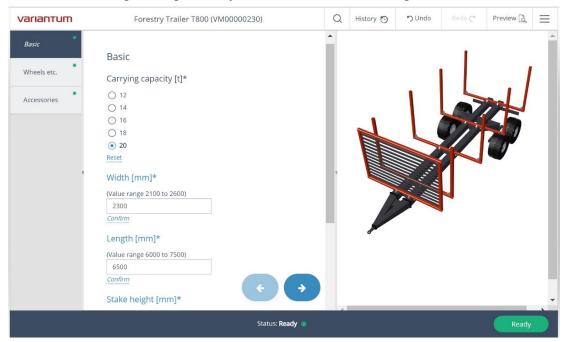


Figure 3–Configuring Products Using VariSales (Courtesy of Variantum)

Conclusion

Many CTO/ETO companies do not know if they will be profitable on a bid until after they deliver the product—not a recipe for financial or market success. CPQ solutions are laser focused on ensuring that only profitable bids are placed in the hands of customers and prospects.

A part of the opportunity for CPQ in discrete manufacturing is in getting companies ready to successfully adopt and use CPQ solutions. Based on our global consulting work, CIMdata believes that many industrial companies are not prepared for the rigor necessary to support CPQ. They will need to upskill in configuration management, rules generation, and their quoting process to get there. CIMdata sees both a software and services play to get them ready to adopt CPQ solutions. In Variantum, companies can get a CPQ offering built by lifecycle configuration management (CM) experts and

⁴ https://www.variantum.com/kone/

⁵https://www.variantum.com/chiller/ and https://www.variantum.com/abloy/

consulting help to make it happen. Their market expansion plans are aggressive but with recent investment and staff expansion CIMdata believes they are realistic. VariSales is one of the few offerings in the market built by CM experts, with most coming out of CRM or other enterprise application areas. This attribute should make it of interest to CTO/ETO companies looking to improve their quoting process and profitability.

True North Enterprise Calibration: A New Model for Sustainable Business and Digital Transformation -CIMdata Commentary

05 November 2019

Key takeaways:

Most transformation programs fail to deliver to promise due to limited understanding of what really needs to change.

Without taking a holistic view, true and sustainable transformation is impossible.

Sustainable transformation requires investment in process change, system deployment, and organizational adjustment.

Sustainable transformation results in repeatable product and process innovation, which maximizes an organization's return on investment.

Customer satisfaction in today's rapidly changing economy requires sustainable transformation.

Executing True North Enterprise CalibrationTM can enable sustainable transformation.

Today's business journals and business school literature are filled with articles about transformation initiatives of different types. Most are talking about digital transformation—the use of new, fast, and frequently changing digital technology to solve business problems.⁶ At a time when many still wonder whether digital transformation is real or just the latest buzzword, many industrial companies are taking the promise of digital transformation very seriously. They often view it as the next big thing, which leverages solutions addressing SMAC (i.e., social, mobile, analytics, and cloud) and IoT (i.e., Internet of Things) supporting technologies and trends that can help companies fundamentally transform their businesses—the way they operate, as well as what and how they sell. Unfortunately, most companies are failing to address the four fundamental aspects of their business—their people, processes, systems, and data interoperability—in a holistic and sustainable manner. All of these aspects must be focused on creating and using the organization's intellectual assets.⁷

For some companies, transformation means survival. For others, it means transforming their products from physical goods and tangible services to less tangible items, like data—in many cases data is becoming the "product." In fact, the rate at which products and services are being bought and installed for the data they generate or collect is increasing. This need for transformation isn't new. Transformation or, more simply put, change has always been required to stay competitive or to stay relevant. Those that don't change generally die quickly or face a painful process as they spiral down to the point of irrelevance. While it is clear to many within the product lifecycle management (PLM) community that an organization's intellectual assets are foundational to a meaningful and sustainable business transformation strategy, unfortunately this truth is not understood by senior leadership within many companies. It continues to surprise CIMdata that even after many years of discussing this topic

⁶ https://en.wikipedia.org/wiki/Digital_transformation

⁷ Research for this commentary was partially supported by IpX, the definers of the True North Enterprise Calibration model.

most companies don't appear to understand that their products and services are a result of their process and product-related intellectual assets, without which the company doesn't exist. Why is this the case? What are so many companies missing?

Not Able to See the Big Picture

For the most part, this is because either management doesn't understand that true sustainable transformation will only result when end-to-end business optimization is considered and then achieved, or they understand this but don't have the authority to execute in the holistic manner necessary to achieve the desired result. This problem clearly rests at the feet of old and outdated management techniques. At the core of this problem is business' overreliance on departmental structures, processes, roles and responsibilities, metrics, and execution—all of which point to organizational sub-optimization. This traditional approach to business structures and execution, historically taught in most business schools, dates back to the introduction of modern business operational theory. Unfortunately, this has not changed very much. For many decades this approach was the best way to structure and execute business operations. Fundamentally, this approach is based on the division of labor (which one could argue goes back to the organizational structure of the Roman legions), which in itself, isn't bad, but it does make it difficult to optimize across an organization's various teams and departments. Fortunately, the availability of data, modern information technologies, analytics, and augmented intelligence, among other things provide a typical company with innovative opportunities never feasible in the past. In other words, the optimization achievable today far outreaches what was available yesterday, if a company is willing to break out of the traditional modes of operation.

The sub-optimized results occur due to the lack of control or understanding that end-to-end business optimization is required (i.e., the full consideration and optimization across an enterprise's people, processes, systems, and data aspects). This problem is often made worse because many organizations don't manage their data as if it is a critical business asset. As previously mentioned, everything a company does is based on its data. If a company's data set (i.e., the data used to manage the business, produce products, provide services, etc.) is incomplete and/or inaccurate, the company is usually inefficient and non-competitive, and its resulting products and services aren't as good as they could or should be. To get past this, companies need to place their data as high on the list of value as their other important assets, namely their people and finances. This is another topic that needs to be stressed in today's business schools so that tomorrow's managers and business leaders place the appropriate level of emphasis on the organization's data and its associated management tools and processes.

Other Typical Points of Failure

Like other major business transformational initiatives that truly seek to change the business, digital transformation can also fail due to poor planning, lack of governance, and lack of focus. For example, lack of program oversight, due to no executive steering committee or executive sponsor, often dooms a business transformation program. The inability of the overall governance structure to manage the project's complexity is another sign that a program is doomed. So are poor coordination, overcomplexity (e.g., attempting to do too much too fast), lack of critical budget availability, thinking that technology will make it all work, and/or underdeveloped plans that are continually changing or not clear. Other causes of failure include not having the appropriate supporting technologies in place to enable the new way of working and not defining metrics that help measure continuous improvement. The sad truth is that these will not lead to true transformation. At best a company can enjoy a brief respite, but not the sustainable transformation they seek. This begs the question—what is sustainable transformation and how can one achieve it?

Sustainable Transformation

Sustainable transformation changes the business in a manner that increases product and process innovation, as well as maximizes its return on investment (ROI)—providing phased digestible change and associated incremental value. Furthermore, sustainable transformation institutionalizes and embeds the change into the business's processes and culture (i.e., into how the business operates).

For a company to successfully transform, the transformation initiative has to be core to the business. This is because true, sustainable transformation cuts across all departments and often includes development partners, suppliers, and customers. It can't be viewed or managed as an information technology (IT) program. The company's transformation strategy needs to be built on a solid foundation of business justification, as well as a set of strategy elements designed to evolve as the business evolves. Additionally, the business needs to think of the transformation as being like performing open heart surgery on a person while they run a marathon. These transformations are complex undertakings that must be accomplished as the business continues to run and deliver its products and/or services to the market. So, the business must strive to keep the complex simple—making changes in structured and manageable ways. Other things to remember are that sustainable transformation:

Isn't something a company implements overnight. As a result, what the business defines today may not be appropriate tomorrow. This means that flexibility and configurability are critical.

Requires a company's transformation strategy and associated roadmap and support to be robust and holistic. "Rome wasn't built in a day" ... transformation is a journey.

Must support the evolving nature of a typical enterprise and how the transformation strategies should be defined and implemented in a way that naturally addresses change. Change happens; you might as well embrace it.

Ultimately, if it is worth doing, then it is worth doing right the first time. This means the only good transformation is one that is sustainable. If sustainability is the goal then what are the critical success factors?

Critical Success Factors

A 2018 *London Times* special insert discussing digital transformation included a collection of transformational journey-related learnings, issues, and challenges faced by companies who have attempted major transformations.⁸ These learnings included:

Transformation must be ongoing and central. Business transformation isn't a part time job. To be successful, the entire company must be involved.

Transformation can't harm the employees. A company's employees are the most important assets a company will ever have. They must be part of the journey and see value in taking the journey.

There is No Choice. Transform or die should be a company's focus. As the quality guru W. Edwards Deming stated: "It is not necessary to change. Survival is not mandatory."

A transformational culture must be cultivated. This new culture must accept and embrace change. Changing a company's cultural takes time and effort, but without the right culture changes the transformation is unlikely to be sustainable.

Innovation must be fostered. Innovation is critical, in part because it establishes and maintains a company's competitive position. It can provide product and company differentiation, while improving customer satisfaction and retention.

New skills must be developed. Transformation requires change. That includes defining and learning new

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⁸ Digital Transformation. Raconteur. *London Times*. 26 September 2018.

skills.

Leaders need to improve. One must remember that sustainable change has no end. It must permeate the business—from top to bottom—requiring management to improve.

The "people premium" must be unlocked. Success ultimately relies on people, the core asset of the business. It is only through their transformation that the company will maximize the benefits of its transformation.

These learnings align well with CIMdata's more than 35 years of business transformation experience. However, there is one critical underlying learning missing from the list. *The best transformations follow a best practice approach* built to leverage the strengths of the company (i.e., that which has made it successful), as well holistically and incrementally addressing people, processes, and the supporting technologies that create and manage the organization's critical intellectual assets. The Institute for Process Excellence's (IpX) True North Enterprise Calibration is one such approach.

True North Enterprise Calibration

True North Enterprise Calibration describes IpX's best practice-based approach to sustainable business and digital transformation. IpX, which is perhaps best known for defining and delivering the CM2 methodology and associated certification, has added additional capabilities to CM2 to build a best practice-based approach that is designed to define and support sustainable business transformation. IpX's approach and associated service delivery model enables organizations to benchmark, assess, and transform today's and tomorrow's business challenges into successful elements of their business. According to IpX, these challenges provide innovative opportunities and incorporate the appropriate set of business process and enabling technology-based capabilities that are on the mind of a company's executives, such as Model-Based Design, Additive Manufacturing, Artificial Intelligence, Operational Excellence, and many others, into the way the business operates.

IpX's True North Enterprise Calibration model, as illustrated in Figure 1, includes the following eight main elements:

Ecosystems Assessment—used to identify the strengths and opportunities associated with an organization's people, processes, systems, and data.

Training & Certification—includes an extensive set of training and certifications, e.g., CM2, RISE, Model-Based Systems Engineering (MBSE), EIA-649, Document Control, Software Lifecycle, and Building Information Modeling (BIM).

Enterprise Roadmap—a focused functional and phased approach designed to achieve value and sustainable transformation.

Business Engagement Strategy—a comprehensive improvement strategy used to prioritize the most valuable elements of the transformation journey being considered.

Organizational Change Management—the promotion, using IpX's RISE model (Retention through Inclusion, Service & Equity®), of a collaborative mindset and deployment methods for managing change.

Integrated Process Excellence—a focus on process improvement that results in increased employee engagement, greater collaboration, accountability, and ownership.

Digital Transformation—the IT enablement of an organization's product design and delivery capabilities.

Performance Monitoring—setting clear objectives, concise indicators, and valid and measurable

transformation plans that ensure success.



Figure 1—True North Enterprise Calibration Model *(Courtesy of IpX)*

IpX and its True North approach, which is underpinned by a CM2-based enterprise operating model and modern digital platforms, stresses that "...business processes and their enabling systems represent the major organizational activities and functions used to perform work and conduct business," and that clear, concise, and valid data is at the core of these processes and systems. IpX views an organization's data to be much more than a simple tool. According to IpX, it's the organization's DNA—the foundational building blocks that allows an organization to leverage its intellectual assets, optimize current product offerings, and conceptualize and deliver tomorrow's products. This view is very important because, as mentioned earlier, a company operates on its data. The better the data, the better the organization operates. Mr. Joseph Anderson, IpX's President, states that "...there will no longer be a difference between information and material because products will be dynamically linked to their application and supporting information." He goes on to say that "A corporations data is so much more than a simple tool, it's the organizations DNA." CIMdata couldn't agree more.

In a recent IpX article, IpX wrote:

"Think of the Digital Thread as the digital connective tissue between enterprise disciplines and datasets akin to the building blocks of a DNA strand (see Figure 2). Individually they each tell part of the story from a different perspective and with a different focus. But connected together they become far more powerful. They build upon one another to create a product or project...a Digital Twin. Thus, allowing an organization to work initiatives and challenges tactically with a confidence that the scope of the change is understood not only at its current point in the lifecycle but with an understanding of downstream implications to ensure the decisions being made address the full lifecycle of the product."

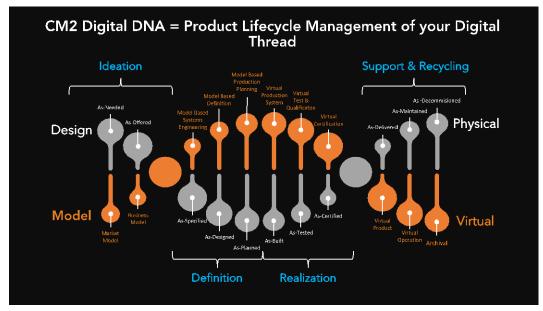


Figure 2—Enterprise Disciplines and Dataset DNA

(Courtesy of IpX)

CIMdata finds this to represent a compelling description of an organization's end-to-end lifecycle—from ideation, to definition, to realization, and finally to support and recovery. CIMdata finds it refreshing to see IpX talking about the complete end-to-end optimization of the lifecycle, something that CIMdata has been stressing for decades.

It is also refreshing that IpX believes that breakthrough business process improvement outcomes are achieved by holistically addressing the interoperability of an organization's people, processes, technologies, and data. Again, this is something that CIMdata has stressed for decades. Finally, CIMdata commends IpX for stating that "Technology enables process change, but desirable business improvement outcomes cannot be achieved without organizational changes. Ultimately, people must be inspired, empowered, and engaged." All core tenants of sustainable transformation described herein.

Concluding Remarks

While IpX is a relatively new organization (established in 2015), its roots go back more than 30 years to the founding of the Institute of Configuration Management and the then CMII (now CM2) best-practice. In a short period of time, IpX has been able to apply CM2 in the broad and deep manner it has always been designed to support, but they haven't stopped there. They have not only defined a robust and comprehensive business transformation model, they have also added RISE and other key elements that define and ensure sustainable transformation. CIMdata is impressed and is very interested in watching IpX grow and build additional momentum behind what they are doing.

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Acquisitions

Altair acquires DEM Solutions, Expanding Solver Portfolio into Discrete Element Method Analysis 08 November 2019

Altair announced the acquisition of DEM Solutions, makers of EDEM, the market-leader in Discrete Element Method (DEM) software for bulk material simulation.

Altair's leading solutions for machinery and materials simulation will become even more powerful with the addition of EDEM for bulk materials simulation by offering new tools that can provide insight to the interaction between materials such as pellets, tablets, powders, coal, soil and rocks with machinery. This systems-level simulation capability will provide critical insights for optimizing machinery design, material handling and manufacturing efficiency in a broad spectrum of industries including pharmaceutical, chemical and food processing, agriculture and heavy engineering such as mining.

With this acquisition, Altair customers now have the ability to design and develop power machinery while simultaneously optimizing how this equipment processes and handles bulk materials.

"Altair continues to broaden our solution portfolio to offer our customers the best software stack in the business," said James Scapa, Altair's chief executive officer and founder. "With DEM Solutions, we will expand into DEM, helping our customers improve their business operations and productivity through this holistic system view."

Blue-chip companies around the world also use EDEM to reduce costs of operations, shorten product development cycles and drive product innovation. In addition, EDEM is used for research at more than 300 academic institutions worldwide.

"We are thrilled to join the ranks of such a globally relevant and growing software player," said Ian Williamson, chief executive officer of DEM Solutions. "The possibilities to scale our solutions by integrating them with Altair's broad physics solver portfolio alongside their deep technical bench is incredibly exciting."

First introduced to the market in 2006, DEM Solutions software is used for simulation and development of equipment that handles or processes bulk material and is based in Edinburgh, UK with offices in Japan, Korea and the US.

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CONTACT Software acquires majority stake in ISKO engineers AG

07 November 2019

CONTACT Software, a provider of solutions for the development and operation of smart products acquires the majority of shares in Munich-based ISKO engineers AG.

ISKO, headquartered in Munich, Germany, is an expert and solution provider for modeling, validating and verifying products in the automotive and mechanical engineering sectors through Computer Aided Engineering (CAE). The company's customers include all well-known German automotive manufacturers and suppliers.

CONTACT and ISKO are two companies with a clear focus, many years of experience and high

competence in the field of digital product models and associated product development processes. CONTACT focuses on product and process structures in order to support division of labour, collaboration and validity through work products. ISKO focuses on complementary procedures, methods, CAE processes and tools that model and simulate the physical behavior of product components and systems and thus optimally complement CONTACT's range of services.

With CONTACT's investment, the two companies are intensifying their long-standing trusting cooperation. It opens up valuable synergies from the combination of data and process management and simulation methods. This includes consulting services for management and methods of both companies as well as the respective portfolio of software solutions.

The common goal is to make sustainable use of the potential of digitization and model-based systems engineering. Companies and users are provided with suitable CAx tools and solutions for data and process management as well as for the interface between tools and management. Initial results can be expected, for example, in the area of simulation management. In addition, investments in the area of machine learning will be increased.

"ISKO and CONTACT have been working together for many years. We are convinced that the partnership will enable us to make even better use of the existing potential," explains Karl Heinz Zachries, CEO and founder of CONTACT Software. "With now 15 OEMs as customers, we are an interesting solution provider for the industry," Zachries continues.

"Our customers and, especially, our OEM partners expect us to provide the highest level of methodological and, increasingly, IT expertise. Through the connection with CONTACT, we can now meet this demand even better," emphasizes Michael Krause, member of the Executive Board of ISKO engineers AG.

ISKO engineers will continue to be managed as an independent company. The ISKO founders Michael Krause and Michael Probst remain shareholders and board members of ISKO engineers AG and will continue to manage the company's operations in the future.

"We are looking forward to working with the exceptionally competent, talented and young ISKO team. It is our aim to use the complementary potential for the further growth of both companies", points out Zachries.

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DXC Technology Acquires Customer Experience Consultancy Bluleader

05 November 2019

DXC Technology announced it has acquired Bluleader, an award-winning Australian consulting company focused on delivering Customer Experience (CX) solutions.

Bluleader was recently awarded SAP 2019 CX Partner of the Year ANZ and 2019 CX Partner of the Year APJ.

"We are excited about expanding the reach of Bluleader into DXC's diversified client base, so that our employees are engaged in interesting, challenging and career-enhancing projects," said Robin Apfel, managing director, Bluleader. "This combination will enable us to leverage DXC's market presence, intellectual property and expertise to expand the size and scale of Bluleader as part of DXC Oxygen's Integrated Practice."

Increasingly, enterprise clients are seeking a complete view of the customer and competing to deliver personalized customer experiences as part of their brand promise. The addition of Bluleader will strengthen DXC's SAP practice, DXC Oxygen, and further provide clients with integrated solutions across the entire SAP Customer Experience portfolio.

"The acquisition of Bluleader is an integral part of DXC's commitment to continue to grow and invest in SAP-based customer experience solutions and more broadly our SAP Practice, with the joint strategic goal of achieving our position as the number one SAP partner in Australia and New Zealand," said Seelan Nayagam, managing director, DXC Technology in Australia & New Zealand. "With a strong track record of selling and implementing SAP CX Solutions, Bluleader will expand DXC's customer portfolio and accelerate the growth of DXC's Oxygen practice."

With customer experience at the centre of most organizational strategies, this acquisition strengthens DXC's ability to help clients acquire and retain customers as well as grow market share. Bluleader's CX innovations will be scaled globally to address the CRM, eCommerce and eMarketing needs of our clients to help them improve their customers' experience.

"Bluleader has grown to a team in excess of 80 CX specialists and we are proud to provide services to over 40 clients across Australia and New Zealand (ANZ)," said Marco Formaggio, Bluleader's founder.

Bluleader's client portfolio includes prominent household names such as Lion, Transport for New South Wales, Metcash, Rheem, Ausgrid, Fisher and Paykel Healthcare and Woolworths.

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Company News

Ajinomoto and Accenture to Establish Joint Venture to Help Drive Ajinomoto's Operational Transformation

07 November 2019

Ajinomoto Co., Inc. and Accenture have agreed to establish a joint venture in Japan to help the food and biotech company accelerate its operational transformation.

The new company, Ajinomoto Digital Business Partners Co., Inc., will run the operations of Ajinomoto's corporate divisions, which include human resources, office management and procurement. Starting in April 2020, the new company will be 67% owned by Ajinomoto and 33% by Accenture.

Ajinomoto Digital Business Partners will leverage the power of robotic process automation, analytics and artificial intelligence — as well as other solutions for business process transformation — to deliver services that enhance the functionality and efficiency of Ajinomoto's corporate functions, using the

insights from these intelligent operations to help Ajinomoto drive tangible business value. As part of its work, Accenture will leverage its expertise in digital transformation in the consumer goods and services industry, as well as its business process services.

"Ajinomoto remains focused on priority product domains and improving employee productivity to realize sustainable growth and become a genuine global specialty company," said Masaya Tochio, representative director, member of the board & corporate senior vice president, Ajinomoto. "The joint venture with Accenture will foster the next generation of talent that focuses on higher value-added work to provide competitive services and help Ajinomoto perform a pivot to the operating model that consistently delivers greater customer value."

Atsushi Egawa, country managing director of Accenture, Japan, said, "For organizations to drive transformation by improving productivity and creating new value, they need to incorporate digital technologies into every process through cooperation with external partners. Using our global experience and expertise in digital transformation and our industrialized processes, we will serve as Ajinomoto's partner throughout their transformation journey, helping Ajinomoto reinforce its foundation for further growth."

Ajinomoto realized that transforming its corporate and other business functions would require using digital and other innovative technologies beyond its existing capabilities. The company has agreed to form the joint venture with Accenture because it realized that such an arrangement would enable Ajinomoto to enhance its corporate capabilities and drive its operational transformation to a greater degree than the company could do on its own. This, in turn, would enable Ajinomoto to achieve its vision of becoming a "genuine global specialty company" driven by cutting-edge bioscience and innovative chemical technologies.

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Autodesk Dublin Demonstrates Its Entrepreneurial Drive With Rapid Team Growth 04 November 2019

From the moment you walk into the Autodesk Dublin office, you're surrounded by a lively atmosphere and buzzing team energy. It's hard to believe that just over 18 months ago, this team had started its journey as Autodesk's EMEA hub.

We chose Dublin because of its global business environment, access to rich talent, ability to support European languages and quality of life for employees. We've learned some valuable lessons along the way, but the fact still remains that Dublin is a vibrant, multicultural and creative city and these qualities align well with Autodesk's brand and culture.

We've grown to 230 employees in that time, and today we're excited to announce that we're opening a whole new floor in our office at 1 Windmill Lane – doubling our overall capacity to 400.

It's a credit to the strength of this team and incredible talent the Irish market has to offer. Not to mention the city has global appeal to international talent. We have over 30 nationalities under one roof, collaborating with Autodeskers and our customers around the world. You can learn more about the office and joining the team here.

With our continued success in Ireland, EMEA and around the world, we're excited to be growing the Dublin operation with more office space and new people to support these ambitions. Attracting and retaining the right talent to our team is our focus, so that Autodesk can help our customers solve the

design and make challenges affecting Ireland and beyond.

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CONTACT Software and partners establish Industrial Lab in China

05 November 2019

CONTACT Software and Shandong Xuanji Industrial Automation have founded China's first "Digital Virtual Simulation Lab". Here, visitors experience how they can successfully develop and operate smart industrial products. In the virtual environment, PLM and IoT solutions run which convey the application benefits with concrete examples from practice.

Shangdong Xuanji Industrial Automation develops manufacturing solutions for the smart factory and has recently become a member of the CONTACT Global Ecosystem. With assistance from the Davao Group, an investor in technology providers such as Xuanji, both partners have founded a "Digital Virtual Simulation Lab" in the Chinese metropolis of Jinan. Here, they show integrated solutions for digital value creation in product development, production and service, which also use latest methods of AI and data analytics.

The new industrial lab from CONTACT Software and Xuanji is a key municipal project for the economic development of the regional industries and beyond. The district government has promoted its settlement in the Davao Smart Industrial Park and promised further support. The Governor of Jiynang District and other senior politicians were present when the simulation laboratory was officially opened by signing the contracts.

In China, the focus is currently on Industry 4.0 and there is great interest in solutions for successful implementation. "Smart products and production systems are the starting point for automated or even autonomous control of digital processes," says CONTACT Managing Director Karl Heinz Zachries

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Mastercam Announces 2019 Wildest Parts Competition Winners

04 November 2019

CNC Software, Inc., the developers of Mastercam, has announced the winners of the 2018-2019 Wildest Parts Competition. The Wildest Parts Competition is held each year to encourage student interest and participation in manufacturing. The competition is open to students at the secondary and postsecondary levels to create parts demonstrating creativity and technical skill using Mastercam. The Wildest Parts Competition has been revamped this year, adding a new division for professional Mastercam users to enter parts they created.

In the Secondary Division, Riley Traver from Van Buren Tech won first place for submitting a sprinting spike base plate. Sports are a big part of Traver's life. He has been running track since 7th grade and will continue into college next year. Traver said that making this part was hands down the most challenging project he has even undertaken in his two years in the Advanced Manufacturing program.

Sebastian Johnson from Hamilton High School placed 2nd with a Da Vinci Cryptex. Savannah

Schneider, from Capital High School, placed 3rd with her submission of custom stirrups.

In the Postsecondary Division, Colin May from Erie Community College won first place for submitting an engine block. May wanted to make an aluminum V8 engine block for a while, and he comes from a family that has been in the manufacturing industry for more than 50 years. He had to juggle work, school classes, and finding the time to work on his engine block. But he finished it and is extremely proud of what he has accomplished.

Robert Englehart from Washington State University placed 2nd with an oil pan. Ryan Speidel, from Erie Community College, came in 3rd with a BMX stem.

In the Teams Division, Seth Culp's group from Rowan-Cabarrus Community College submitted a steam engine. Their USS Monitor Steam Engine was a challenge, and they had less than a semester to design in SOLIDWORKS® and finish the part in Mastercam.

Tyler Dorsey and teammates from Cincinnati State Technical and Community College placed 2nd with their shark bottle opener. Blake Bishop and Jeff Harper from Cincinnati State Technical and Community College placed 3rd with their complex gears.

In the Professional Division, Lee Yung Cheng from Shih-Cheng Precision Technology submitted a bone plate. Because of the need to fit the human bone accurately, there were many challenges to overcome such as irregular complex surfaces, multi-angle drilling, and more.

Zane Decker, an instructor from Cincinnati State Technical and Community College, placed 2nd with a logo puck which he used to demonstrate 2D toolpaths for his students.

Every entrant in the competition receives a Mastercam t-shirt, and the winning entrants receive cash awards, certificates, and other prizes for their placement in the competition.

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Oracle Honors Excellence in Construction and Engineering

06 November 2019

Oracle is recognizing those Americas customers who are charting new paths and reimagining the building industry through technology with the 2019 Oracle Construction and Engineering Excellence Awards. Building on the Oracle Aconex Connect Awards, this new awards program highlights noteworthy customers that are successfully improving project delivery across industries.

Project- and asset-intensive organizations face numerous challenges, including growing project complexity, rising competition, fragmented project supply chains, and increasing risks. Selected from a large number of entrants, this year's winners demonstrated compelling results in overcoming these challenges through their use of Oracle's Construction and Engineering solution suite, including Oracle's Primavera solutions, Oracle Aconex and Oracle Textura Payment Management.

"The Oracle Construction and Engineering Excellence Awards winners represent organizations of all sizes that have demonstrated remarkable success from the digital transformation of their businesses across the project and asset lifecycle," said Mark Webster, senior vice president and general manager, Oracle Construction and Engineering. "From significant productivity gains, to better payment outcomes across the supply chain, to unlocking project intelligence for smarter decision making, the improvements realized by these organizations underscore their leadership in driving project delivery forward, with benefits that extend to all stakeholders. We congratulate the honorees and are thrilled to recognize their

accomplishments."

Select results from the 2019 Oracle Construction and Engineering Excellence Awards winners:

Austin Commercial achieved enterprise-wide standardization with Oracle Textura Payment Management, reducing pay application processing time from four to five days to just two days.

Ameren Corporation reduced the time spent evaluating project justifications by 90 percent (from 30-60 minutes, to just three to five) with Oracle's Primavera P6 Enterprise Project Portfolio Management (EPPM) and Oracle's Primavera Unifier.

BlueCross BlueShield of South Carolina accomplished organizational transformation with the help of Oracle's Primavera Unifier and is now able to close internal work orders 50 percent faster than previously.

DPR Construction eliminated 360 accounting hours per week through its implementation of Oracle Textura Payment Management and a direct link to its ERP system, meaning tens of millions of dollars now reach subcontractors up to seven days faster.

Sage Homes Northwest sped up work package assignment to new projects by 66 percent utilizing Oracle Primavera Cloud

Customers were nominated for the 2019 Oracle Construction and Engineering Excellence Awards in the following categories:

Data-driven Insights

Enterprise-wide Standardization

Innovation in Sustainability

Innovator of the Year (Individual award)

Platform Expansion

Social Impact Project of the Year

Solutions Implementation

Systems Integration

In addition, honorees were recognized for their achievements in the following segments: Energy and Resources, Industrial Manufacturing, Public Infrastructure, and Residential and Commercial.

Read about our Global 2019 Oracle Construction and Engineering Excellence Awards winners: https://www.oracle.com/corporate/awards/construction-engineering/winners.html

PROLIM collaborates with MAZAK CORPORATION on NX CAM Initiatives

05 November 2019

Mazak Corporation is one of the largest machine building company in the world. Through

the collaboration of PROLIM Global Corporation and Mazak Corporation, we worked together on a project for an aerospace and defense customer. PROLIM's value added software expertise and implementation capacities allowed for this transition from software, manufacturing, simulation, and programming to be a breeze for Mazak when building machines for our mutual customer.

Rudy Canchola is the Western Regional Applications Engineer at Mazak and during this collaboration, Rudy was able to give PROLIM feedback on this tremendous job performed. "We were instructed to use PROLIM by our customer. So, we didn't have any background of what PROLIM was or what they did, and we were pleasantly surprised when we got into the project that PROLIM was extremely professional and very quick to create the posts, edits, and modifications that we required for our customer," said Canchola.

PROLIM 's collaboration with Mazak was a tremendous honor. Canchola mentioned, "This project had an extremely tight deadline, and they worked very, very hard and worked with us to make sure we hit that deadline." Since the start of this project, "Mazak has been a great resource for PROLIM allowing us to continue working together in the future," says Tony Lisle, Engineering Manager at PROLIM.

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Events

CM Labs to Showcase Immersive Driver Simulators at I/ITSEC 2019

08 November 2019

CM Labs Simulations, Inc. announced that Vortex® Studio product demos, including enhanced driver training simulators, will be present on two partner booths at I/ITSEC 2019 (December 2-6 —Orlando, FL). At the influential military tradeshow, CM Labs will exhibit the advanced-physical realism, ease of deployment, and simulation-enhancing capabilities that are offered through the real-time, system-level simulation software.

Vortex Studio is a COTS real-time simulation platform offering high-fidelity modeling for military training applications, including ground vehicles, logistics & engineering equipment, and maritime operations. It is an efficient tool for rapid modeling, testing, and validation of simulation content—one which is simple to integrate into existing simulator frameworks or game-engines.

CM Labs product experts will be on hand at Bohemia Interactive Simulations (booth #2534) and Epic Games (booth #2161). This team will highlight the full feature set of Vortex Studio as a high-fidelity simulation creation and deployment platform focused on how the simulation platform easily integrates with 3rd party software to augment users' existing tech stacks.

"At I/ITSEC 2019, we will show how Vortex Studio is the ideal tool to develop true-to-life simulators for training on vehicles, mechanical equipment, and naval vessels," said Lisa Barbieri, Vice President, Marketing and Customer Experience, CM Labs. "When this realism is tied to other software tools and existing workflows, teams can enhance and supercharge their existing processes, projects and

programs."

Vortex Studio for Immersive Training

To see the power of Vortex Studio in action, attendees of I/ITSEC are invited to experience multisensory vehicle training demos powered by Vortex Studio and CM Lab's partners Bohemia Interactive Simulations and Epic Games.

These military-customized experiences combine high-fidelity physics with rich visuals, motion, haptic, and auditory feedback to emphasize the advantages of Vortex Studio in driver and operator training scenarios. These demonstrations highlight multiple benefits of building training content via Vortex Studio, including the ability to pair with other software technologies in a way that makes simulation integration and enhancement easier than ever.

"Vortex Studio brings vehicles and equipment to life," noted Barbieri. "When military personnel train in scenarios (land or maritime) that are enriched by Vortex Studio, they gain experience that is directly transferable to operational situations."

To book a meeting or reserve a demonstration session with the CM Labs Sales team at I/ITSEC, please visit our I/ITSEC registration page.

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OpenBOM Presents SaaS BOM Management At PI PLMx in San Diego

08 November 2019

OpenBOM announces that its CEO and co-founder, Oleg Shilovitsky will make a presentation and lead the discussion entitled "Is Cloud-Based PLM Systems the Answer to a Connected Supply Chain?" at PI PLMx San Diego at the Paradise Point Resort in San Diego, California on 11-12 November. Mr. Shilovitsky's presentation will take place on day 2 of the event afternoon as part of a focus group discussion about digital transformation in the PLM industry.

SaaS PLM software is rapidly moving from the early days' concept to the mainstream software paradigm. SaaS PLM software is capable to deliver a new way of data management and real-time collaboration. OpenBOM delivers a unique industry SaaS solution focusing on data management and real-time collaboration between engineering teams, contractors and suppliers. OpenBOM provides direct integrations to leading CAD, PDM, PLM and ERP tools enabling connections between companies in the supply chain and contract manufacturing.

"SaaS software delivers a huge advantage in ease of data management online, sharing information and connecting people and teams across the globe," says Shilovitsky. By connecting people, applications and data OpenBOM allows customers to maximize the value and optimize the use of existing and future technologies together".

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Financial News

Trimble Reports Third Quarter 2019 Results

06 November 2019

Third Quarter 2019 Financial Summary

Third quarter 2019 GAAP revenue of \$783.9 million was down 1 percent as compared to the third quarter of 2018. Third quarter 2019 non-GAAP revenue of \$784.3 million was down 3 percent as compared to the third quarter of 2018.

Buildings and Infrastructure revenue was \$309.8 million, up 5 percent. Geospatial revenue was \$155.1 million, down 16 percent. Resources and Utilities revenue was \$121.1 million, down 9 percent. Transportation revenue was \$198.3 million, up 4 percent. Segment revenues reflect the results of Trimble's reportable segments under its management reporting system and are non-GAAP measures.

GAAP operating income was \$91.7 million, up 18 percent as compared to the third quarter of 2018. GAAP operating margin was 11.7 percent of revenue as compared to 9.7 percent of revenue in the third quarter of 2018.

GAAP net income was \$78.1 million, up 6 percent as compared to the third quarter of 2018. GAAP diluted earnings per share were \$0.31 as compared to GAAP diluted earnings per share of \$0.29 in the third quarter of 2018.

Non-GAAP operating income of \$162.0 million was down 3 percent as compared to the third quarter of 2018. Non-GAAP operating margin was 20.7 percent of revenue as compared to 20.8 percent of revenue in the third quarter of 2018.

Non-GAAP net income of \$121.1 million was down 3 percent as compared to the third quarter of 2018. Non-GAAP diluted earnings per share were \$0.48 as compared to non-GAAP diluted earnings per share of \$0.49 in the third quarter of 2018.

The GAAP tax rate for the quarter was an expense of 1 percent as compared to a benefit of 15 percent in the third quarter of 2018, and the non-GAAP tax rate was both 19 percent in the third quarter of 2019 and 2018.

Operating cash flow for the first three quarters of 2019 was \$462.8 million, up 20 percent as compared to the first three quarters of 2018. Deferred revenue for the third quarter of 2019 was \$419.0 million, up 15 percent as compared to the third quarter of 2018.

During the third quarter, Trimble repurchased approximately 3.3 million shares of its common stock for \$121 million, and year to date has repurchased approximately 4.7 million shares for \$180 million. Approximately \$172 million remains under the current share repurchase authorization as of the end of the third quarter.

"Our third quarter revenue reflected prevailing market uncertainties, while earnings per share and cash flow exceeded expectations," said Steven W. Berglund, Trimble's president and chief executive officer. "Although we anticipate market ambiguities to persist for the remainder of the year, we demonstrated the ability to control costs while continuing the transformation of our business model towards recurring revenue."

Forward Looking Guidance

For the fourth quarter of 2019, Trimble expects to report GAAP revenue between \$768 million and \$798 million and GAAP earnings per share of \$0.20 to \$0.24, and non-GAAP revenue between \$770 million and \$800 million and non-GAAP earnings per share of \$0.46 to \$0.50. GAAP guidance assumes a tax rate of 19 percent and non-GAAP guidance assumes a tax rate of 19 percent. Both GAAP and non-GAAP earnings per share assume approximately 252 million shares outstanding. For the fiscal year of 2019, Trimble expects to report GAAP revenue between \$3.209 billion and \$3.239 billion and GAAP earnings per share of \$1.08 to \$1.13, and non-GAAP revenue between \$3.215 billion and \$3.245 billion and non-GAAP earnings per share of \$1.91 to \$1.95. GAAP guidance assumes a tax rate of 14 percent and non-GAAP guidance assumes a tax rate of 19.5 percent. Both GAAP and non-GAAP earnings per share assume approximately 253 million shares outstanding. A reconciliation of the non-GAAP measures to the most directly comparable GAAP measures and other information relating to these non-GAAP measures are included in the supplemental reconciliation schedule attached.

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Implementation Investments

Eviation Completes the First Prototype of its Zero-Emission Electric Commuter Aircraft with Dassault

06 November 2019

Dassault Systèmes announced that the electric air mobility pioneer, Eviation Aircraft, used the 3DEXPERIENCE platform on the cloud to develop the first prototype of its zero-emission, all-electric regional commuter aircraft – Alice – in two years.

In the race to create and commercialize new categories of sustainable air mobility systems, Eviation Aircraft accelerated the prototype's development by deploying the "Reinvent the Sky" industry solution experience based on the 3DEXPERIENCE platform. This scalable cloud solution supported the company's holistic approach to 3D, composite design and flow simulation with improved collaboration, all while offering full data security in a single, standards-based environment.

"The electrification of aircraft isn't a question of if, but when. As we aim to make clean regional air travel accessible for all, we needed to be able to make a product that people trust, sit in and fly, and do it quickly," said Omer Bar-Yohay, CEO, Eviation Aircraft. "The right way to go about it was to use tools that we would want to use in the long run, and to work in the cloud to ensure fast, secure access and global collaboration. When we selected the 3DEXPERIENCE platform, we were an early stage startup with limited resources and time. We've developed our commercial-stage prototype faster than we imagined, and have already signed our first customer in the U.S."

Eviation Aircraft realized that transforming a prototype into a product that can be manufactured by the hundreds each year would require empowering its engineers with the long-term knowledge and knowhow to build it to maturity for the next generation.

Once commercialized, Alice will be the world's first all-electric regional commuter aircraft, capable of carrying nine passengers and two crew on a single charge for 650 miles at 10,000 feet.

"Dassault Systèmes works with companies of all sizes, including new companies like Eviation Aircraft that participate in a true Aerospace Renaissance, changing the way the world travels and commutes,"

said David Ziegler, Vice President, Aerospace & Defense Industry, Dassault Systèmes. "The 3DEXPERIENCE platform delivers solutions tailored for these innovators to implement new ways to conceptualize, design, manufacture, test, certify and operate their programs."

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INFINITI Taps Accenture Interactive as its Experience Agency of Record in the Middle East 04 November 2019

Accenture Interactive was appointed by INFINITI Middle East to handle the auto manufacturer's digital marketing duties across 11 markets in the Middle East region. The collaboration will assist INFINITI Middle East to continue to innovate in new ways by using digital channels and position the company as a leader in the ever-changing automotive world.

Leveraging its digital capabilities and its expertise in the automotive industry, Accenture Interactive will help INFINITI amplify and optimize its presence across digital channels and touchpoints, and will also be responsible for the management of INFINITI's digital marketing initiatives — including website content management, digital analytics and performance marketing. The collaboration will drive INFINITI's digital innovation to anticipate and meet the demands of today's digital-savvy customers, thereby improving the overall customer experience. "Making cutting-edge vehicles isn't enough for automakers to maintain their competitive edge in today's digital marketplace," said David Fregonas, Accenture Interactive lead in the Middle East. "Digitally-empowered consumers are also looking for innovative customer experiences, and INFINITI Middle East understands the important role that digital plays in shaping new experiences. As leaders in transforming the car-buying process, Accenture Interactive is thrilled to support INFINITI Middle East on its transformation effort."

Karsten Jankowski, General Manager of Marketing and Public Relations for INFINITI Middle East, commented, "We look forward to collaborating with Accenture Interactive to strengthen our digital marketing efforts. A welcoming customer experience and customer-centric thinking are the core of our brand. In a digitalized world, this requires a seamless online-offline experience enabling a 360-degree of the customer and synchronized, cross-device access to personalized shopping."

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Infosys to help Siemens Gamesa Renewable Energy digitalize its IT Landscape

05 November 2019

Infosys announced a strategic long-term partnership with Siemens Gamesa Renewable Energy (SGRE) to support its digital transformation journey. Infosys will provide end-to-end IT infrastructure transformation of SGRE, including hybrid cloud transformation, roll-out of a software defined network, the set-up of an intelligent service desk, and digital workplace services. Infosys has also been selected by SGRE to provide application management and transformation services.

As part of the partnership, Infosys will enable SGRE to align its existing disparate IT setup into a harmonized and consolidated infrastructure landscape. Infosys will provide a hybrid cloud solution integrating multiple Public cloud platforms with its Private cloud to bring agility to SGRE's IT

infrastructure while ensuring technical and financial synergies. Usage of Infosys Infrastructure Management Solution Suite will enable faster time to market with service catalogue-based offering across all IT Infrastructure. SGRE will benefit from an optimised, stable and always-on network connectivity across 50+ countries with the rollout of a Software Defined Network.

Infosys will also deliver next generation workplace services with enhanced self-help and self-heal capabilities enabled by AI and automation tools.

Jasmeet Singh, Executive Vice President and Global Head of Manufacturing, Infosys, said, "We are delighted to be selected as a strategic partner of SGRE in their transformation journey. Leveraging our innovative solutions, domain knowledge and a clear comprehension of SGRE's business strategy, we look forward to enabling their core modernisation, enhancing cloud capabilities and consolidating disparate and heterogeneous infrastructure and processes into a single SGRE global standard."

Alan Feeley, Chief Information Officer, Siemens Gamesa Renewable Energy, said, "When considering our desired IT operating model, we were looking for a partner that brings a careful balance of innovation, operational excellence and sustainable commercial viability. With Infosys, we are very confident that these attributes are at the core of their operating culture. We are very excited to partner with Infosys on this journey of modernisation. We are impressed by Infosys Next Generation Application and Infrastructure Management Framework, their agility & focus on delivery excellence, and a clear understanding of our business strategy."

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Once-Reticent Utilities Accelerating Move to the Cloud - Oracle

06 November 2019

A large majority (71 percent) of utilities now use cloud software, up from just 45 percent three years ago according to a new Oracle survey. Improving customer experience was noted as the key driver for increased cloud investment. But while progress has been made, 85 percent of respondents still cite security as a top concern and noted that regulatory acceptance remains a barrier to cloud adoption.

"Just a few years ago, utilities looked at cloud computing with skepticism at best. Today, many realize it's essential to their survival," said Brian Bradford, vice president, industry solutions, Oracle. "Utilities are increasingly seeing cloud as a fundamental asset in meeting ever-evolving expectations, mitigating security concerns, and turning data into an opportunity to modernize and evolve their operations to better serve constituents and customers."

The report, conducted by research firm Zpryme, surveyed more than 150 global utility leaders to better understand the pace and breadth of cloud computing adoption. Respondents spanned investor-owned, municipal, cooperative and district/federal utilities representing electric, gas, water, and renewables. To download the full report, visit: https://etsinsights.com/reports/the-acceleration-of-cloud-computing-for-utilities/

Changing Customer Expectations

Customers are increasingly looking for more information regarding their overall utility usage and bill and how to lessen the impact of both. And they expect this with the high level of service and personalization that they are enjoying in other sectors, such as retail and banking. Utilities see cloud technologies as a means to provide the speed and control to meet these customer expectations. So, it was no surprise to see continued investment in customer experience and engagement (31 percent) and

customer information (29 percent) cloud systems in the top five investment priorities for utilities in the coming years.

Drowning in Data

Sixty-four percent of utilities noted that cloud computing is critical to my company's future success. A key driver is the need to better manage an ever-growing pool of data coming from smart meters, IoT sensors, customers' home energy devices, and more. Utilities realize that it is becoming too great a task and risk to manage this influx without a significant investment in tools that can capture and analyze grid edge, supply chain, and customer data quickly. Utilities hope to use the technological flexibility provided by cloud computing to innovate by using data to solve business problems from grid optimization to managing distributed energy resources (DERs).

"Utilities are seeing the impact that digital transformation is having on their business model," said Jason Rodriguez, CEO of Zpryme. "The challenge is so much greater than simply capturing millions of disparate data points. Utilities need IT tools to manage and drive better business decisions and cloud computing provides the agility to more effectively integrate data predictively use it."

Security Concerns Remain

Utilities remain concerned about security (85 percent) and privacy (81 percent) and also rated these as the biggest barriers they face when it comes to using or expanding cloud computing. Concerns, however, were not around the vulnerability of cloud computing technology itself, but rather a growing barrage of increasingly sophisticated cybersecurity threats. Whether it is IoT devices, field area networks, or 5G networks, utilities are operating in a hyper-connected digital ecosystem that can provide new and varied opportunities for nefarious actors to expose their networks. Utilities recognize that they need to stay vigilant and that will require help from both regulators and vendors.

Regulatory Right-Sizing

While improving, many regulators globally still don't allow for utilities to earn a rate of return on their cloud investments, which impedes upgrading legacy IT systems. While utilities recognize the role that regulators play in approving their prudent expenditures, 26 percent cited regulatory acceptance as a continued barrier to cloud adoption. The majority of utility respondents (75 percent), however, also note that regulators can play a strong role in helping protect customer privacy and security.

Clouds Ahead

Many utilities dipped their toe in the cloud waters with enterprise applications, such as enterprise resource management (ERP) or human capital management (HCM) and 74 percent plan to spend more on cloud in the next 3-5 years. While a move to better serve and engage customers is driving this next phase of cloud adoption, operational system investments are not far behind. Forty-three percent of utilities have increased their operational spending by at least 25 percent over 2015 levels.

To learn more about Oracle's utility solutions, please visit: www.oracle.com/utilities

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Rocket Lab to use Siemens software to explore new frontiers of space

07 November 2019

Siemens reports that Rocket Lab, an aerospace manufacturer and the world's leading small satellite launch service, will start using Siemens software to scale up production and continue its growth

trajectory. To date, the company has launched 40 satellites to space and is expanding services.

Rocket Lab plans to implement Siemens hi-tech industrial software to help digitally manage the lifecycle needs of the business. The software is from the Xcelerator portfolio, which is from Siemens Digital Industries Software and includes Teamcenter, the world's most widely used digital lifecycle management software, and NX software for computer-aided design (CAD) and manufacturing.

This announcement comes as Rocket Lab prepares to integrate all its design, engineering and production systems to establish an end-to-end digital thread that enables increased transparency and efficiency across various offices.

Speaking on the decision, Rocket Lab's Vice President of Global Operations, Shaun O'Donnell, said, "As we've grown, so has our production capacity and the platforms associated with various products and processes. Using Teamcenter, we'll be able to combine various aspects of data related to the same part, assembly and system to maintain a single source of truth across the life cycle of the product. Also, as we grow, NX will give our designers increased performance and stability to cope with larger assemblies.

"Investing in the right digital platforms that allow us to easily scale with growth is critical to the sustainability of our business. With offices around the world, we rely heavily on the access of relevant information that impacts the efficiencies of our production processes," said Mr. O'Donnell.

Rocket Lab will use the same software that the top 20 global aerospace manufacturing companies have implemented to drive digital transformation across all phases of operations. With Xcelerator, Siemens offers the most complete digitalization value chain to aerospace manufacturers - from the initial concept through to performance in the field -enabling innovation and next-generation design and manufacturing.

Speaking on the announcement, Samantha Murray, Managing Director of Siemens Digital Industries Software in the region said, "The space race is becoming increasingly important globally and here in Australia and New Zealand. While the real race will be played out way above us, here the pillars driving competitiveness will be digital and dependent on how technologies support access to global supply chains."

"When you are responsible for sending millions of dollars' worth of equipment hurtling into space, you want to ensure it's been designed leveraging the same benchmark technology trusted by top aerospace companies worldwide. Rocket Lab is a progressive company with some incredible talent and a bold vision. We're thrilled that they've chosen Siemens software to help with their next phase of growth," said Samantha.

Rocket Lab will use Siemens solutions across the product life cycle including for CAD Management, BOM and configuration management, Engineering Change and Document Management.

Siemens Xcelerator software portfolio is an integrated portfolio of software, services and application development platform that can be personalized and adapted to fit customer and industry-specific needs to help companies of all sizes become digital enterprises. It is widely used to develop some of the most sophisticated global products and systems in industries including automotive, aerospace, shipbuilding and high-tech electronics.

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Tefron Deploys Infor ERP Across All Global Operations

06 November 2019

Infor announced that Tefron, which develops, manufactures and markets lingerie and sportswear, has completed an enterprise resource planning (ERP) deployment of Infor M3. The system is now live for more than 100 users across its production and distribution centers in Israel, USA, Canada and China.

Infor M3 includes fashion industry specializations, best practices, and comprehensive knowledge gathered from the world's leading fashion companies. The ERP solution, which includes a friendly and convenient user interface, provides capabilities for managing the development and design of new collections, raw material procurement, regulatory compliance, full supply chain visibility, one-to-one production and financial management.

The implementation project was carried out by Intentia Israel — an Infor partner — in collaboration with Tefron's information systems department. Infor M3 went live simultaneously at all the company's locations around the world, while meeting the timetable and without interrupting the company's day-to-day operations.

All new components of Infor M3 (version 13.4) were embedded, including the innovative Infor ION (Intelligent Open Network) platform that enables fast and easy integration of Infor solutions with other enterprise solutions — electronic archives, M3 Ad Hoc reporting tools and M3 Enterprise Collaborator (MEC) workflow application and more. Tefron also intends to embed the Infor OScentral operating platform later, which enables the management of all solutions and tools under one synchronized, easy-to-use interface.

Gregory Koren, Tefron director of information systems, said: "Tefron is committed to openness and technological innovation. Infor M3 provides a significant infrastructure for our growth, and scope to explore a variety of options in the future. We went live as planned with no disruption or delays to our critical processes, which was essential to us."

Dedi Angel, chief operating officer at Intentia Israel, said: "Infor M3 for the fashion industry is a comprehensive and powerful solution that meets the world's most stringent requirements in this industry. It provides a friendly user interface, enables fast and efficient integration for information sharing and collaboration among employees and unparalleled productivity compared to other solutions. Tefron joins a number of leading fashion organizations in the world that have embraced the solution, and we are proud to help the company achieve its goals."

"My role is to support our clients to best deliver their strategic goals," says Shera Haliczer, Infor country manager in Israel. "Tefron has earned a global reputation for technological superiority and offering the newest and most innovative techniques. We are delighted to support them in their quest to being the market leader in fashion, athletics and wearable technology."

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Product News

Benefits for Machining and Automating Part Connections With New CABINET VISION from HEXAGON

06 November 2019

The latest version of the CABINET VISION design-to-manufacturing solution for woodworkers

delivers greater control and flexibility for the machining of part connections, empowering users to better automate and manage every aspect of production.

Released by the Hexagon Manufacturing Intelligence Production Software business, CABINET VISION Version 12 features an all-new connection manager that delivers complete control over the machining that occurs where two parts meet by enabling users to easily define and automate those connections.

For instance, if a dado with pre-drills or fixed position-dowels with RTA fittings are needed, the connection manager provides the tools needed to define those specific operations, and many more.

"When developing CABINET VISION Version 12, we were focused on giving our users more control over how their cabinets are constructed," said CABINET VISION Product Manager Chip Martin. "The new connection machining in version 12 is a game-changer for automating how our customers connect their parts together, whether for cabinets or closets."

This latest version also features a completely redesigned CABINET VISION Assembly Manager, which is utilized by engineers to specify construction methods and standardize the production of their products. In version 12, the assembly manager offers increased flexibility, including the ability to select connections per part, and an enhanced, user-friendly interface.

The new connection manager, along with the ability to assign connections in the CABINET VISION assembly manager, delivers unparalleled flexibility for defining and automating construction methods. This development offers greater control over every aspect of connection machining while maintaining both ease of use and part quality.

Improved ease of use in CABINET VISION Version 12 includes the simplification of defining part differences based upon cabinet class "breakouts" — such as base, upper, tall, and others. While these breakouts have been a significant feature since the software's inception, it required that the user define breakouts for all questions about the part. Enhanced in version 12, breakouts can now be limited to a specific question for the part, significantly reducing the complexity of defining construction methods.

Among this latest version's interface enhancements is the option to display all contextual, or right-click, menus as radial menus. Radial menus offer a number of key advantages — most notably speed and ease of use.

An additional upgrade to ease of use and efficiency offered with CABINET VISION Version 12 is the all-new ability to view and move to different rooms while working in elevation view. The room selection option being accessible via the elevation view significantly reduces the number of mouse clicks required to work through a multi-room project. Prior to version 12, users were required to exit the system's elevation view and enter plan view to move to a different room.

CABINET VISION Version 12 offers a direct link to the Leica Geosystems 3D DISTO™ measurement tool, which accurately captures 3D coordinates with the precision needed for project planning. Designed to eliminate unwelcome surprises due to measurement inaccuracies, this direct link with CABINET VISION enables users to drive the layout of jobs directly on the job site.

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DXC Technology Launches Managed Multi-Cloud Services Powered by VMware Across All Cloud Environments

05 November 2019

DXC Technology launched a multi-cloud orchestration, automation and governance solution that transforms managed services delivery across any cloud.

DXC Managed Multi-Cloud Services powered by VMware provides consistent service management at scale and enables clients to maximize investments in VMware for a significant multi-cloud competitive advantage. The new cloud solution was announced here at VMworld Europe.

According to IDC, by 2024, some 90% of Global 1000 organizations will have multi-cloud management strategies that include integrated tools across public and private clouds. DXC Managed Multi-Cloud Services powered by VMware provides a universal cloud management platform that offers self-service, automation, and continuous delivery of IT services via an infrastructure-as-code (IaC) model.

DXC Managed Multi-Cloud Services powered by VMware accelerates time to market, automates managed services and asset delivery, and helps optimize costs. The new solution delivers software defined networking and enables DevSecOps — all with intrinsic security and governance using IaC across multiple clouds via blueprinting, deployment pipelines, and policies.

"Multiple clouds are the new reality, but managing those cloud environments can be complicated," said Eugene O'Callaghan, senior vice president and general manager, Cloud and Platform Services, DXC. "DXC Managed Multi-Cloud Services powered by VMware offers a holistic cloud management solution to speed up the pace of digital change in hybrid cloud environments, optimize workloads for cloud and traditional IT, and deploy the right workload on the right platform."

DXC Managed Multi-Cloud Services powered by VMware eliminates the need for extensive integration throughout the IT landscape to provide a consistent management and operational experience across VMware Cloud providers. Leveraging VMware vRealize Automation Cloud, the offering builds upon a proven management stack to deliver managed services on current and future multi-cloud architectures.

"DXC and VMware have a shared history of driving IT transformation and growth," said Susan Nash, senior vice president, Strategic Corporate Alliances, VMware. "By combining VMware's hybrid cloud offerings with DXC cloud services and industry expertise, DXC Managed Multi-Cloud Services powered by VMware gives IT the ability to rapidly deploy a universal management experience across all cloud environments, facilitating a common security, governance and compliance framework that can help minimize risk while accelerating cloud adoption."

DXC Managed Multi-Cloud Services powered by VMware is integrated with DXC Bionix[™] and Platform DXC[™], the company's next-generation delivery platform.

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Trimble Clarity Now Offered as Web Application for Point Clouds and 3D Models 07 November 2019

Trimble announced that Trimble Clarity is available as a stand-alone web application that simplifies the visualization and navigation of 3D data. With this major update, Trimble Clarity enables geospatial professionals to view, use and share 3D point cloud data, models and meshes with engineers, architects, city planners and other project stakeholders via a web browser, which can be viewed on desktop and mobile devices.

The Trimble Clarity web application provides:

3D Data Sharing

The ability to easily use and share 3D data with clients or project stakeholders extends the value of rich 3D data, promotes services and generates new revenue streams. Users can generate private or public web links to share project information, providing secure control over access to the data.

Support for Industry Standard Data Formats

Trimble Clarity supports data from Trimble products, such as the Trimble SX10 Scanning Total Station, Trimble TX Series 3D scanners and Trimble MX9 Mobile Mapping System, as well as data from non-Trimble sources, making it useful for any organization that captures 3D data.

Seamless Integration with Trimble Workflows

With the upcoming version of Trimble Business Center office software 5.20, users can publish their 3D data directly into Trimble Clarity, creating a seamless integration and workflow between both platforms.

Visual Directory

By viewing the 3D data as a location-based project, users are able to more quickly understand the context of the data, significantly improving the ease of use compared to traditional folder-based approaches.

"Trimble Clarity enables users to easily share and view rich 3D point clouds without having to transfer, copy or mail large data sets," said Tim Lemmon, marketing director of Trimble Geospatial. "By leveraging an intuitive, browser-based experience, stakeholders can easily visualize and understand project data, enabling greater collaboration and informed decision making."

In addition, Trimble Clarity now features:

Cloud integration including Trimble Connect, Dropbox and Google Drive so users can easily log in and view data directly from where it is already stored

Support for 3D point cloud, imagery and mesh model formats, including: .las/.laz/.e57/.skp/.obj Free use for two projects. Subscription plans are available for organizations that need to view more than two projects.

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