PLM Road Map & PDT North America 2022

Digital Transformation and PLM – a call for PLM professionals to redefine and re-position the benefits and value of PLM

Day 1 - 24 May

7:30 a.m. – 8:30 a.m. | Registration & Continental Breakfast in the PLM Collaboration Café

8:30 a.m. – 8:40 a.m. | Welcome
Peter Bilello, CIMdata & Håkan Kårdén, Eurostep

8:40 a.m. – 9:20 a.m. | Opening Presentation: Digital Skills Transformation—Often Forgotten Critical Element of Digital Transformation
Peter Bilello, President & CEO, CIMdata [Bio]
The success of a digital transformation ultimately depends on an organization's workforce and its willingness to utilize and take advantage of newly enabled capabilities. Has identified a dozen evolving trends and key enablers—CIMdata's Critical Dozen—for the digitalization of the industrial economy. While all 12 are critical, digital skills transformation is perhaps the most neglected and overlooked element. This presentation outlines the Critical Dozen, emphasizing the need for digital skills transformation, along with discussing the current state of enablement within industry, what success looks like, the key points of failure, and a four-step framework that can be deployed to achieve the appropriate alignment.

9:20 a.m. – 9:50 a.m. | The Link from PLM to 'Enterprise' Lifecycle Management (ELM) Realization
Roger Hobley, BAE Systems [Bio]
Asset-based industries need to close the gap between business leaders grappling with delivery issues, COVID-19, and simply too many options for 'everything' clouding the archetype of PLM. Domain Knowledge and guidance are how a business can realize a strategy and embrace Digital Disruption's challenge. This presentation discusses the identification, needs, and benefits of harvesting and deploying Domain Knowledge.

9:50 a.m. – 9:55 a.m. | Summary

9:55 a.m. – 10:25 a.m. | Networking Break & PLM Collaboration Café

10:25 a.m. – 10:55 a.m. | Sponsor Thought-Leadership Vignettes

Aras   PTC   Siemens Digital Industries Software

10:55 a.m. – 11:25 a.m. | The Digital Transformation of PLM: Where are the Humans?
Dr. Thomas Hedberg, University of Maryland Applied Research Laboratory (ARLIS) [Bio] A product lifecycle is an information system. From a sociotechnical perspective, information systems are composed of four components: tasks, people, processes, and technology. Most digital transformation concepts only discuss technology. We cannot be successful in digitally transforming PLM without understanding how changes in technology affect the workforce and policies of the lifecycle and vice

versa. This presentation aims to ensure the human is included in the discussion of digitally transforming PLM and will explore the socio-technical considerations.

11:25 a.m. – 11:55 a.m. | A&D PLM Action Group Project to Define Objectives, Requirements, and Roadmaps for Digital Twin/Digital Thread Solutions
Kenneth Swope, The Boeing Company [Bio]
In 2021, the A&D PLM Action Group (AD PAG) launched a project based on existing industry knowledge and capability of digital twins and digital threads to evaluate digital twin/thread technology capabilities against an initial set of use cases. The AD PAG sponsored a team to define objectives, requirements, and roadmaps for Digital Twin/Digital Thread solutions for creating and managing the digital representation of a product through the various stages of the product lifecycle. This presentation will provide an overview of the digital twin/digital thread project and key learnings from the first two phases.

11:55 a.m. – 12:00 p.m. | Summary

12:00 p.m. – 1:15 p.m. | Networking Lunch & PLM Collaboration Café

1:15 p.m. – 1:55 p.m. | KEYNOTE: Making the DoD Digital Engineering Strategy a Reality - An update in Year 4
Stephanie L. Possehl, DoD [Bio]
OUSD (R&E)'s Digital Engineering, Modeling and Simulation (DEM&S) organization is at the heart of the DoD's digital transformation effort. DEM&S' mission is to advance the state of engineering practice and engineering enablers to support lifecycle activities and digital transformation across the DoD. This presentation reflects on the 2018 Digital Engineering Strategy. It will describe digital engineering, modeling & simulation, and data-centric initiatives that have occurred since the release, which include current efforts to achieve the strategy's vision. Finally, it will identify opportunities for the future as we focus on governmental, academic, and industry efforts to deliver solutions more rapidly to the warfighter.

1:55 p.m. – 2:35 p.m. | The Digital Twin/Digital Thread and BOM View Capabilities of the US Navy's Enterprise PLM Program
Robert Lamanna, U.S. Navy [Bio]
In this presentation, we will describe and demonstrate the enterprise Product Lifecycle Management Integrated Decision Environment (ePLM I*DE*) at the Naval Surface Warfare Center, Port Hueneme Division (NSWC PHD). At the core of ePLM I*DE* is a PLM application which maintains a weapon system's "Digital Twin" for the collaborative creation, management, dissemination, and use of product definition information that spans from product concept to end-of-life. The I*DE* maintains the "Digital Thread" and enables a set of standardized, collaborative decision support capabilities for optimizing weapon system readiness and ownership costs using defensible analytic models. We will conclude with examples of how ePLM IDE establishes continuous critical links between configuration changes, system baselines, and supporting analysis.

2:35 p.m. – 2:40 p.m. | Summary

2:40 p.m. – 2:55 p.m. | Networking Break & PLM Collaboration Café

2:55 p.m. – 3:25 p.m. | Digital Transformation of Systems Engineering: Challenges & Opportunities
Dr. Dinesh Verma, Stevens Institute [Bio]
The US DoD Digital Engineering Strategy envisions the transformation of systems engineering from traditional methods and artifacts based on documents to full integration of digital data and models in an authoritative source of truth. The industry has three interrelated goals: all engineering activities in a common collaborative digital infrastructure; full use of data and models to improve the efficiency and productivity of engineering; and greater use of system models to integrate system data and models across domains and disciplines. Industry still faces challenges in standardizing digital artifacts and interoperability of tools. Based on extensive studies conducted by the Systems Engineering Research Center, this presentation will discuss the envisioned future of digital systems engineering, its benefits, and current challenges.

3:25 p.m. – 3:30 p.m. | Summary

3:30 p.m. – 4:30 p.m. | CEO Spotlight: View From the Top: The Future of PLM in the Age of Digitalization
moderated by *Peter Bilello, CIMdata*
*Roque MartinAras [Bio]*
Jim Heppelmann, PTC [Bio]
Tony Hemmelgarn, Siemens Digital Industries Software [Bio]
This CEO spotlight will provide an insightful discussion between those in the know and in control of where digital enablement is heading. Discussion topics include PLM's place within an enterprise architecture, integration and interoperability strategies, process enablement and adoption acceleration, and the digital enablement and PLM landscape in 5 to 10 years.

4:30 p.m. – 4:35 p.m. | First day summary

4:35 p.m. | Conference Adjourns for the Day

4:35 p.m. – 6:00 p.m. | Happy Hour - avoid the traffic and join us for drinks and snacks in the PLM Collaboration Café
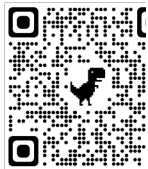
We want your feedback!
Please scan the QR code and complete our conference evaluation. Also access at:
https://lp.constantcontactpages.com/sv/poTHSOE/PLMRoadMapPDTNA2022

Day 2 - May 25

8:00 a.m. – 8:30 a.m. | Registration & Continental Breakfast in the PLM Collaboration Café

8:30 a.m. – 8:40 a.m. | Welcome

Peter Bilello, CIMdata & Håkan Kårdén, Eurostep

8:40 a.m. – 9:20 a.m | KEYNOTE: Digital Transformation and the Role of PLM

Bob Parker, IDC [Bio]

Digital transformation has become the default business strategy for companies wanting to become more customer-centric, innovative, and resilient. For product-centric industries, this has put a renewed emphasis on the capabilities of PLM albeit with a substantial reshaping of the value proposition. This presentation shares research related digital transformation progress and how the idea of delivering outcomes has changed the mission of PLM.

9:20 a.m. – 9:50 a.m. | The Sustainability Imperative

Stan Przybylinski, CIMdata [Bio]

Sustainability has gone from "nice to have" as part of a corporate social responsibility program to a strategic requirement. In 2022, CIMdata conducted research to better understand how these communities view the issue on which they must converge to be successful. This presentation will summarize CIMdata's research and provide insights on how leading industrial companies are reaching their sustainability objectives.

9:50 a.m. – 9:55 a.m. | Summary

9:55 a.m. – 10:25 a.m. | Sponsor Thought-Leadership Vignettes

Accenture   Altium   Autodesk

10:25 a.m. – 10:45 a.m. | Networking Break & PLM Collaboration Café

10:45 a.m. – 11:15 a.m. | MoSSEC - A standard to improve decision-making for complex products - What it is, Why it is needed, How it works with other PLM standards, and
Implementation experiences

Judith Crockford, Eurostep [Bio]

In January 2022, the A&D PLM Action Group published the report Interoperability Standards for Aerospace & Defense, Release 1.0. One of the standards mentioned is MoSSEC, ISO 10303-243. This standard was published in December 2021 so is not yet that well known to most people. MoSSEC stands for "Modeling and Simulation information in a collaborative Systems Engineering Context" and is the result of a team effort including Airbus and Boeing to fill a gap in the standards landscape for MBSE and PLM. The MoSSEC website describes it as "An ISO standard to improve decision making for complex products". This presentation explains what is meant by that statement, describes where MoSSEC fits in the standards landscape, and explores what MoSSEC will do and what it will not do. The presentation concludes with some implementation experiences, both as an end-user and an implementer.

11:15 a.m. – 11:45 a.m. | Prioritizing MBSE Standards & the Creation of the Knowledge Graph

Mark Williams, The Boeing Company [Bio]
The conference's theme is digital transformation, so in addition to implementing documentation replacement capabilities we must consider the digital thread, twin, and of course MBSE. To remain objective the advances in MBSE practices must be measurable, and several organizations have identified specific benchmarks to measure MBSE progress. Are all of the models linked together, and reusable? What models drive decisions, and do the architecture specifications feed requirements to the CAD designers and Manufacturing process? In this presentation we will discuss how to estimate data integration through the implementation of two new data standards that stand to significantly enhance the value of our MBSE transformations.

11:45 a.m. – 12:15 p.m. | The Gigaton Challenge, PLM and Agile
James Windon, Trane Technologies [Bio]
This presentation focuses on Trane Technologies' Gigaton Challenge and the importance of business systems that support corporate strategies such as Sustainability and Lean. In today's world, PLM is much more than PDM and we will discuss how PLM has taken on a vital role in achieving these key corporate strategies and how quantifying the value of PLM has changed over the last decade. Organizations are increasingly struggling to be leaner and more agile. It is important that an organization's processes and systems keep up and perform as true enablers, and not be perceived as a hindrance to productivity. We will discuss the importance of Lean and Agile in setting the cultural foundation for effective PLM implementations.

12:15 p.m. – 12:20 p.m. | Summary

12:20 p.m. – 1:30 p.m. | Networking Lunch & PLM Collaboration Café

1:30 p.m. – 2:10 p.m. | Debate: Stretching the Digital Thread Across the Supply Chain
Craig Brown, ex General Motors (representing the voice of the OEM) [Bio]
Mark Pendergast, ex Delphi, and Aptiv (representing the voice of the Supplier) [Bio] The concept of a Digital Thread linking multiple representations of a product, each tuned to the needs of various creators and consumers along the lifecycle, is powerful. While the potential benefits of a consolidated information resource that contains all the information and maintains all the relationships between data elements needed to support multiple communities' perspectives, such as Product, Manufacturing, and Service Engineering, is compelling, the journey is fraught with challenges. Not least among them is weaving a digital thread between an OEM and their Tier 1 suppliers. This session will have a moderated interchange between prominent thought leaders representing the two ends of the OEMsupplier digital thread. Craig Brown, former PLM chief at General Motors, representing the OEM perspective and Mark Pendergast, former PLM chief at Delphi, representing the Tier 1 perspective, will answer questions and dialogue on the essence of a digital thread, what works well, what doesn't and why, and what needs to change to maximize the business value inherent in this concept.

2:10 p.m. – 2:40 p.m. | MBSE Data Interoperability: Status and Challenges
Mark Williams, The Boeing Company [Bio]
This presentation will offer an update on the findings and recommendations of the AD PAG MBSE data interoperability project and an overview of the other major industry initiatives underway, including related emerging data standards to help achieve MBSE processes and best practices.

2:40 p.m. – 2:45 p.m. | Summary

2:45 p.m. – 3:05 p.m. | Networking Break & PLM Collaboration Café

3:05 p.m. – 3:50 p.m. | Fireside Chat moderated by *Dr. Ken Versprille, CIMdata*
Peter Bilello, CIMdata [Bio]
Håkan Kårdén, Eurostep [Bio] Bob Parker, IDC [Bio]
The conversation with our three industry visionaries will touch on the relationship between Digital Transformation, Digital Twin, and Digital Thread and the possible impact each will have on PLM. We will also delve into the people and process part of PLM alongside technology, where PLM is today, and what the future might require for successfully scaling up PLM.

3:50 p.m. – 4:00 p.m. | Conference summary

4:00 p.m. | Conference Adjourns

We want your feedback!

Please scan the QR code and complete our conference evaluation.

Also access at:

https://p.constantcontactpages.com/sr/poTHSOE PLMRoadMapPDTNA2022