

The 31st Annual

ConX18

*Hosted by
The Institute for Process Excellence*

September 17 – 18, 2018



Your journey towards Enterprise Excellence starts here.

CONFERENCE GUIDE

| AGCO | Airbus | Apple | Arçelik | Amazon | ASML |
Aselsan | Bentley Systems | Boeing | Bombardier | Bose |
Boston Scientific | Caterpillar | CMPRO | Configit |
Cummins | Ciclo PLM | Delphi | Duke Energy | **We proudly**
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industries... | Elite | Embraer | Esterline | Faurecia | FNSS
| General Electric | General Motors | Gulfstream |
Hewlett-Packard | Honeywell | IBM | IMMI | Lear |
Lockheed Martin | Maytag | Microsoft | Mölnlycke Health
Care | Motorola | NAMMO Talley | NASA | NATO | Nike |
Nokia | Northrop Grumman | NSE Technology | **All Striving**
for enterprise excellence. | Philips | Pratt & Whitney |
Raytheon | Roketsan | Rolls-Royce | Sandia National
Laboratories | Sprint | St. Jude Medical | Sub-Zero/Wolf |
Tata Consultancy Services | Tusas Engine Industries, Inc.
| TE SubCom | Whirlpool | Woodward | Zimmer



The IpX team and our attendees look forward to seeing you at our 31st annual event ConX18 being held at the Hyatt Regency O'Hare during September 17-18, 2018.

This event connects professionals striving for operational excellence. 2018's event has the central theme: **Your journey towards Enterprise Excellence starts here.**

We will have two days of keynotes and panels with speakers who are cross-industry executives within aerospace, agriculture, automotive, building infrastructure, defense, medical, regulatory, and technology. They will share their business transformation stories and real-case studies within the full spectrum of people, processes and technology.

The event will focus around these key topics and their relation to our CM2 methodology: The Digital Thread and Twin, Operational Excellence, Enterprise Change Management, Industry 4.0, and Sustainable strategies for an Industrial Internet of Things.

Our group panel discussions and networking breaks provide opportunities for cross-industry lessons learnt.

Want to spend a whole week with us? We're offering five of our fantastic courses from Wednesday through Friday.

For additional information contact us at services@ipxhq.com.

Joseph Anderson
Vice President of Services



CONX 2018 – September 17 - 18

7:00 AM – 8:15 AM Breakfast Snacks, Coffee, Tea

8:30 AM – 9:00 AM	IpX – Institute for Process Excellence	Opening Remarks
9:00 AM – 9:25 AM	Northrop Grumman	Paul Nelson - Chief Technical Strategist
9:25 AM – 9:50 AM	Purdue University	Nathan W. Hartman, Ed. D. - Purdue Department Head, Computer Graphics Technology
9:50 AM – 10:15 AM	Configit	Henrik Hulgaard - CTO Configit A/S

10:15 – 10:25 Break & Networking

10:25 AM – 10:50 AM	WiM – Women in Manufacturing	Allison Grealis - President/Founder
10:50 AM – 11:15 AM	CIMdata	Peter Bilello - President
11:15 AM – 11:40 PM	ARAS	Rob McAveney – Chief Architect
11:40 AM – 12:30 PM	IpX - Ray Wozny / Joe Anderson Northrop Grumman - Paul Nelson Purdue - Nate Hartman Configit – Henrik Hulgaard WiM - Allison Grealis CIMdata - Peter Bilello ARAS – Rob McAveney	Open MIC Q&A Speaker Panel with Dr. Nathan Hartman as the guest moderator

12:30 PM – 1:30 PM Lunch (Global Congress and Committee Updates and Exhibitor Presentation: Peter Sacco – Founder/CEO, Adelante Shoe Co.)

1:30 PM – 1:55 PM	Medical Devices Group	Joe Hage – Group Leader, MedicalDevicesGroup.net
1:55 PM – 2:20 PM	Mölnlycke Health Care Javelin Technologies Inc.	Catie Jelinski - Quality & Regulatory Systems Infrastructure Manager Susan Rockafellow - Project Manager
2:20 PM – 2:45 PM	Edwards Lifesciences	Vinu Gurukar - Senior Director of PLM Joshua Arnaldo - PM, Senior Analyst, Lean Six Sigma Master Kristen Lucero - Certified Auditor & Configuration Analyst
2:45 PM – 3:10 PM	AABME	John Koehr, PMP, CAE – ASME Managing Director of Technology Advancement and Business Development

3:10 – 3:20 Break & Networking

3:20 PM – 3:45 PM	ASML	Martijn Dullaart - Configuration Management Expert/Architect
3:45 PM – 4:10 PM	TCS	Anurag Jain - Chief, Europe Manufacturing Innovation and Transformation Group
4:10 PM – 5:05 PM	Medical Devices Group - Joe Hage Mölnlycke Health Care - Catie Jelinski Javelin - Susan Rockafellow Edwards Lifesciences - Vinu Gurukar AABME – John Koehr ASML - Martijn Dullaart TCS - Anurag Jain TE SubCom – Robert La Fond	Open MIC Q&A Speaker Panel with Dr. Nathan Hartman as the guest moderator
5:05 PM – 5:30 PM	JoeBarkai.com	Joe Barkai - Consultant, Speaker, Author & Blogger

6:00 PM – 9:30 PM Dinner Reception

Registration 09/16/2018 9:00 AM – 6:00 PM & 09/17/2018 7:00AM – 8:15 AM www.ipxhq.com

CONX 2018 – September 17 - 18

7:00 AM – 8:15 AM Breakfast Snacks, Coffee, Tea

8:30 AM – 9:00 AM	IpX – Institute for Process Excellence	Opening Remarks
9:00 AM – 9:25 AM	Bentley Systems	Alan Kiraly - Senior Vice President of Asset Performance
9:25 AM – 9:50 AM	Siemens	Mark Homrich - Manager, Product Management, Siemens PLM Software
9:50 AM – 10:15 AM	Configit	Scott Perdue - President
10:15 AM – 10:40 AM	Beyond PLM	Oleg Shilovitsky - CEO and co-founder of OpenBOM™ Blogger and Advisor at Beyond PLM

10:40 – 11:00 Break & Networking

11:00 AM – 11:25 AM	IMMI	Michael Benning – Director of Configuration & Change Management
11:25 AM – 12:30 PM	IpX - Todd Egan Bentley - Alan Kiraly Siemens – Mark Homrich Configit - Scott Perdue Beyond PLM - Oleg Shilovitsky IMMI – Michael Benning AGCO - Gary D'Souza	Open MIC Q&A Speaker Panel with Dr. Nathan Hartman as the guest moderator

12:30 PM – 1:30PM Lunch (Global Congress and Committee Updates)

1:30 PM – 1:55 PM	AGCO	Susanne Lauda - Director, Global Advanced Manufacturing Technology
1:55 PM – 2:20 PM	NAMMO Talley	Scott Wertel - Configuration Manager
2:20 PM – 2:45 PM	Bose	Christina Sigrist - Manager, Product Configuration Management Jane Cavicchi - Configuration Management Professional
2:45 PM – 3:10 PM	Roketsan	Cenk Onen - Engineering Director

3:10 PM – 3:30 PM Break

3:30 PM – 3:55 PM	ASML	Martin Haket - Configuration Management Architect
3:55 PM – 4:45 PM	IpX – Semiha Yasar NAMMO Talley - Scott Wertel Bose - Christina Sigrist Roketsan - Cenk Onen ASML - Martin Haket Cimarron Inc. - Bill Woodaman Gulfstream Aerospace - Max Gravel	Open MIC Q&A Speaker Panel with Dr. Nathan Hartman as the guest moderator
4:45 PM – 5:10 PM	IpX - Institute for Process Excellence	Closing Remarks

Training offered September 19 – 21 following the event

Registration 09/16/2018 9:00 AM – 6:00 PM & 09/17/2018 7:00AM – 8:15 AM www.ipxhq.com

Presentation Abstracts

Monday, September 17, 2018

Partner to Achieve Your Mission

Paul Nelson - Chief Technical Strategist, Northrop Grumman

Complex missions require partnerships to reduce risk and help ensure success. Delivering robust Enterprise-level Integrated Process Excellence (IpX) is a complex mission. Organizations typically partner together to increase the likelihood of each achieving their mission and to amplify their reach. Partnering strategies as well as recent Northrop Grumman Innovation System successes enabled by partnering shall be shared.

Digitalization and the Fourth Industrial Revolution: Re-shaping the Manufacturing Workforce

Dr. Nathan Hartman - Purdue University Dauch Family Professor of Advanced Manufacturing and Department Head, Computer Graphics Technology

Accompanying many technological advancements is often a change in a discipline's knowledge base and ways of working, but also within the academic community and labor pool from which it draws its employees. The renaissance occurring today in U.S. manufacturing is not unlike those that occurred at other points in history – it will be transformative and disruptive at the same time. However, unlike those industrial revolutions from the past, the transformation within the modern manufacturing company and its supply network will rely on automation and accessibility of information rather than automation of production or products. The leveling effect of real-time analytics, modeling and simulation, and predictive capability within the design, production, and business IT platforms for making more accurate and timely business decisions can offset lower labor costs provided elsewhere. However, those same technologies and accompanying industrial revolution have the potential to displace more people faster than the previous industrial revolutions combined. This presentation will discuss one of the key elements of that future environment – the digital enterprise – and the impact of digitalization on the accompanying educational and workforce revolution.

Software in Configurable Products

Henrik Hulgaard - CTO, Configit A/S

The evolution of products into intelligent and connected devices is driving trends such as Internet-of-Things and Industry 4.0. Conventional products are being software-enabled in order to increase their variability so that they can be adapted to specific customer needs. However, turning conventional products into smart and connected devices poses new challenges in how to design, deliver and support the products.

This presentation will address challenges related to managing the software in connected and configurable products. Specifically, we will explain how using a logic model to define the interface between the product and its software can help address key challenges.

Strategies to Attract, Retain and Advance Women in Manufacturing

Allison Grealis - President/Founder, Women in Manufacturing and Vice President of Membership and Association Services of the Precision Metalforming Association

In this presentation Allison will address the current state of women in manufacturing and highlight ways companies can attract, retain and advance women in the industry. She also will discuss the Women in Manufacturing (WiM) Association and how it is working to support, promote and inspire women who have chosen careers in the manufacturing sector.

Monday, September 17, 2018

The State of the PLM Industry: Why the C-Suite is Not Happy*Peter Bilello - President, CIMdata*

This presentation will review the current state of the PLM industry with emphasis on today's major trends and issues, including enabling PLM as a digital and transformative enterprise-level innovation platform, and other emerging topics that are critical to the global PLM economy. CIMdata's research and experience reveals that over the past few years industry adoption of many leading-edge PLM technologies, such as analytics and big data, internet of things, cloud computing, augmented reality, and additive manufacturing have matured from investigation and planning to implementation and production. Despite these advancements, many companies are still spending significant time and money tackling PLM's persistent pain points so that they can fully realize the potential value of PLM and its place within their enterprise architecture.

Extending the Digital Thread to X*Rob McAveney, Chief Architect, Aras*

Managing complex products throughout the lifecycle is becoming increasingly challenging. Today, most companies use many separate systems in an attempt to control the complexity of their product lifecycles. But this fragmented environment struggles to keep up and engineers resort to thousands of spreadsheets to keep track.

Without proper configuration management, variant and option management, and systems engineering, digital assets are disconnected and the lack of control and traceability means time wasted re-running expensive simulations to verify requirements have been met and confusion over repair and maintenance procedures.

A Digital Thread implemented on an open PLM platform can provide a solution for dealing with this complexity by connecting digital assets including requirements, CAD models, and simulation results, and enabling configuration management across multidisciplinary domains, product variants, and change throughout the entire lifecycle.

What Is Excellence? Whatever the Customer Says It Is!*Joe Hage, - Leader, MedicalDevicesGroup.net*

Our keynote speaker, Joe Hage, the leader of the Medical Devices Group (350,000+ members), will discuss how everyone in this room really is a marketer at heart. After all, without satisfied customers, all of us are out of jobs. So what changes can we do as engineers, operations and supply chain professionals, and manufacturers do in our everyday work that promotes the kind of excellence our customers seek in our products and services. Joe is a colorful and dynamic speaker so come to the keynote with a sense of fun and readiness to think like a marketer for 25 minutes straight.

Monday, September 17, 2018

PLM Adventures: Viewpoints from a Vendor and a Customer (The good, the bad, and the ugly)

Catie Jelinski – Quality and Regulatory Systems Infrastructure Manager, Mölnlycke Health Care with Susan Rockafellow - Project Manager, Configuration Management Professional, Javelin Technologies

Purchasing a new, or updating an existing, PLM system can be a stressful and daunting task; it can also be fraught with major project disruption if not done correctly. It is imperative that you work with the PLM vendor to ensure you have a successful implementation that meets your requirements and adds value to your organization.

Susan and Catie are CM2 Professionals and will shed light on how CM2 processes and methodologies come into play from both sides of the fence. They will present best practices showing examples of really bad ones.

Susan will discuss this process from a vendor's point of view; Catie will offer her take from the customer's perspective. This will be an interactive session so come prepared with examples, stories, and questions.

Releasing Engineering Capacity for Innovation with an Effective and Efficient Change Management Model

*Vinu Gurukar - Sr. Director of Product Lifecycle Management (PLM), Edwards Lifesciences
Joshua Arnaldo - Project Manager, Senior Analyst, Lean Six Sigma Mentor, Advanced Technology, Edwards Lifesciences
Kristen Lucero - Senior Analyst, Certified Auditor and Product Configuration Specialist, Advanced Technologies, Edwards Lifesciences*

Edwards Lifesciences is the global leader in patient-focused medical innovations for structural heart disease, as well as critically care and surgical monitoring. The ability to effectively and efficiently manage changes to product, process and documentation is critical to our continued success.

Effective change management not only helps us meet regulatory requirements but also reduces waste and releases engineering capacity to innovate faster and help even more patients. By streamlining the Engineering Change Request (ECR) process and moving toward a CM2 Change Management Model, our organization has been able to reduce rework from 70% to 30%, releasing over 50,000 hours (25 FTEs) of capacity back to the organization.

Learn how we addressed the challenges in our organization and introduced the roles, responsibilities and workflows required for a world-class organization to effectively manage change. We will share some of our strategies in building an organizational appetite for a CM2 process and the elements necessary to implement an effective CM2 change process across a large, multi-tiered global organization.

Monday, September 17, 2018

The Role of the Engineer in the Digital Landscape

John Koehr – ASME Managing Director of Technology Advancement and Business Development

Advances in artificial intelligence have been driven by digital engineering — through development of sensors, Industrial Internet of Things, big data analytics, nanotechnology, and others. This talk will highlight the status and the potential for several key technologies that The American Society of Mechanical Engineers (ASME) is focused on, namely manufacturing, robotics, clean energy, pressure technology, bioengineering, and transportation

Adopting AI solutions will incorporate decisions that move beyond traditional, linear thinking. Engineers and technicians, who will be involved in the development and implementation process, will need different training than today's traditional education. Moreover, adoption and implementation of AI requires internationally accepted standards. At the same time, AI will affect how and what types of standards are developed.

ASME is developing standards in verification and validation practices in solid mechanics, fluid dynamics, and heat transfer, applied to nuclear system thermal fluids behavior, medical devices, advanced manufacturing, energy systems and others. These protocols can be added to the future standards that we need for intelligent systems operating based on digital technology. The current “design by rule”, which has dominated the design standards, is insufficient and too simplistic for today's complex systems. “Design-by-analysis” requires different expectations on performance. Therefore, evaluation protocols and new metrics for a broad spectrum of standards are needed to address the “design-by-analysis” process.

As engineers, we will be asking the same questions we always ask: What are the problems? Are we solving the right problems? And are we solving them accurately? While we will use a conventional approach based on available knowledge and best practices, reliance on collaborative knowledge and standards become much more important for these new technologies. Therefore, standards are needed across all domains of digital technologies, to ensure accuracy, reliability, robustness, accessibility and scalability. Other areas for standards development include the evaluation of risk management and hazard analysis of systems, human-computer interactions, machine-to-machine communication, control systems and regulatory compliance.

A Glimpse into the Future of CM

Martijn Dullaart - Configuration Management Expert/Architect, ASML

Have you noticed that the speed of advancements in technology is rapidly increasing? Have you thought about the impact of these advancements to CM?

So far the biggest impact to CM was going from paper based document to a digital document, where the document was still recognizable as a document. Now with Industry 4.0 the drive and need for a digital twin and therefore a digital thread will challenge the ‘classic’ view of CM on what a document is and the impact this will have on people, process tools and data. A glimpse into the future of CM will shed light on the impact of Industry 4.0 and the Internet of Things on CM. And how these are impacting the way products and processes are documented and managed to support the digital thread.

Monday, September 17, 2018

Business Excellence in Digital Era – Paradigms of Configuration Management
Anurag Jain - Chief, Europe Manufacturing Innovation and Transformation Group, TCS

Digital technology advances have set a new stage of value creation for manufacturers. In other words, the way digital products will be developed, priced, sourced, manufactured, sold and maintained is set to transform. In addition, each player, big or small has its best people defining its roadmap for this transformation to what is called – Digitalization or Industry 4.0 or Business Model disruption.

A significant perspective often overlooked though, in assemblies for Industry 4.0 thinking, are the core behavioural tenets common across any 'Business 4.0' (Business 4.0 is TCS vision for any enterprise to leverage abundant possibilities with Digital and Technology possibilities) initiative. These include graduating from focused problem-solving expertise to larger exponential value creation thinking, from efficiency gains through lean management to leveraging ecosystems thinking, from risk avoidance to embracing risk of piloting new business models, and from offering configurable variants to mass personalization.

Configuration management capability in Business 4.0 would be a core competency rather than its perceived current role of a key enabler.

Placing business prerogatives and ecosystem against the framework of Business 4.0 paradigm can help manufacturers identify and define their individual path towards digital transformation. Having defined a roadmap and a to-be state, the next critical task is to define the business architecture-the approach towards customer value proposition, integration of customer and partners in business processes, product architecture, production engineering, installed base management, data protection and security and so on. Conventionally, Configuration Management best practices have focused on achieving agility and accuracy in product definition, sales, and order execution processes. Going forward, as products are 'made to serve' rather than 'made to sell', innovation and agility in configuration management of installed base can disrupt the market share statistics and hence need attention. In fact, AI-driven services based on product usage data can become an industry in itself. Hence manufacturers should revisit their Configuration Management capabilities, gauge maturity levels aligned to business 4.0, and identify what needs to be done

What is your plan to handle this challenge? In other words, what is your plan to benefit from this chance?

Future Perfect? – How Intelligent Machines Are Shaping Business and Society
Joe Barkai - Consultant, Speaker, Author & Blogger, JoeBarkai.com

Artificial intelligence is powering a neck-braking transition from the Information Age to the Age of Intelligent Machines and a paradigm shift in most aspects of business, society, and everyday life. Autonomous cars, personalized precision medicine, chatbots and cobots, lights-out factories, and other intelligent machines will alter the way enterprises operate and promise to improve the quality of life of many individuals. But these intelligent machines also track our every move, expose and create biases, challenge the makeup of the workforce, and, some fear, will one day get a will of their own and go rogue.

Joe will offer a perspective about the promise and perils of AI and machine learning technologies in business and everyday life. He will describe how intelligent robots are transforming many enterprises, manufacturing plants, and transportation. From there, he will discuss threats, both real and perceived, posed by autonomous AI systems, and the societal and ethical implications of a future powered by human-machine relationships.

Tuesday, September 18, 2018

Achieve Operational Excellence: Connect a Digital Thread Through All Lifecycle Stages*Alan Kiraly - Senior Vice President of Asset Performance, Bentley*

In a world that is going digital at an increasingly rapid rate, a holistic approach to information technology is critical to achieving operational excellence. While the broader industry is focused on IIoT strategies, operational analytics, business insight and application of artificial intelligence, all depend on accurate information. Likewise, ISO 55000 and ISO 31000 standards governing asset management and risk require trusted information. CM is the ideal methodology to deliver the information integrity necessary to the achievement of ISO guidelines and the rich insights provided by new data technologies, providing the foundation to achieve operational excellence.

Whether greenfield or brownfield, a great amount of information that will be used by operations of complex asset infrastructure is developed during project planning but is often lost or flattened in the transition between phases. A connected data environment transitions project information to operations seamlessly, removing the need for data migration, reducing risk of information loss, and providing the foundation for effective operational decision support to ensure safe and reliable operations. Continuous handover to operations also promotes faster ROI and reduces time to full operational production capacities.

Learn how a major oil organization has expanded their digital journey to capture project information that flows seamlessly into operations. With successful projects completed, they look to the future to always have accurate, up-to-date, and comprehensive digital baselines for configuration and safe operations of their plants.

Process Excellence: The Digital Thread that binds Digital Twins*Mark Homrich – Manager, Product Management, Siemens*

Digitalization is the catalyst fostering business transformation, and coordinating the development of a digital thread is critical to realizing major business improvements and disruptive innovations. By leveraging the best practices and latest technologies for process excellence, companies can ensure they are spending time on responding to business challenges and focus on developing the best products in the world.

The Engine Matters - You don't buy a truck for the stereo, you buy it for the engine.*Scott Perdue – President, Configit*

When evaluating a configuration rules engine, it's critical to keep focused on the complexity load capability. An underpowered configuration engine can impact business-critical systems, including ERP or PLM, resulting in missed opportunities. When failure is not an option, understanding how to identify, implement and optimize the right technology is crucial. Hear how to evaluate the complexity load of your organization and how not all rules engines are created equal.

Tuesday, September 18, 2018

PLM For The Great Multitude of Manufacturers*Oleg Shilovitsky - CEO and co-founder of OpenBOM™ Blogger and Advisor at Beyond PLM*

Network is a source of achieving efficiency for many businesses. Ford Model-T, Google Search, Facebook News Feed, UBER and many others. Network principles is a foundation of these and many other businesses. Manufacturing companies left single factory buildings and now operate globally. Modern manufacturing and digital transformation demand cross functional coordination between members of product stakeholder network and it is on the top of manufacturing and PLM challenges. PLM was started as a solution to solve data and process control for a single company 20-30 years ago. Existing PLM paradigm is heavily relies on the principles of single version of truth, organizational data and process control. The presentation will speak about general principles of building PLM solutions for the great multitude of manufacturing connected in a network and operating on a global scale.

Starting Up a CM2 Competence: Lessons Learned*Michael Benning - Director Configuration and Change Management, IMMI*

IMMI's growth aspiration includes doubling in size over the coming decade. Managing change effectively has been a key obstacle and IMMI's top corporate improvement objective for multiple years. Michael's presentation will describe the key challenges, improvement strategy and road map, successes to-date, and lessons learned since formation of the Configuration and Change Management Team six months ago.

The Digital Twin is Not an Orphan*Susanne Lauda - Director, Global Advanced Manufacturing Technology, AGCO*

These days the digital twin gets a lot of attention in the media, and the majority of all publications focuses on it as the twin of a product. But this twin has genetics that are influenced by its parents. Those parents are Manufacturing and Supply Chain. And exactly as it is with humans – if a person gets ill, we need to look at the parents for potential genetically inherited diseases, or better yet, test them upfront to avoid potential problems. And that means that we have to have seamless information not only about the design but also about the history of the production sites, which enables us to do a quick root cause analysis, and also allows us to take immediate and reliable counteractions to prevent the spread of the problem. In short, we need a digital replica of the Manufacturing and Supply Chain environment that allows us to simulate and document the “birth process” as well as any intended improvements at a later stage. In the case of AGCO this gets quite complex, because their products may look the same, but are initiated at different locations. CM2 helps to keep the builds in sync by making sure that the correct information is being made available to all sites.

Tuesday, September 18, 2018

The V-Model – Your Phase-gate Approach to Innovation

Scott Wertel - Configuration Manager, Nammo Talley

Scott Wertel continues his series on CM's Role in Innovation. While he has highlighted examples of where the wastes of phase-gate development processes stifle innovation in his previous presentation, the fact is that many companies force this process. In order to comply with phase-gate requirements, can the CM2 V-model be adapted to define phase-gate stages while still being flexible enough to bolster innovation?

Defining Processes within a Shifting Foundation

Christina Sigrist - Manager, Product Configuration Management, Bose
 Jane Cavicchi - Configuration Management Professional, Bose

Based on our workshop, "Defining a Joint Development Manufacturing Process", held at the IPE Symposium 2017, we would like to share how we used your valuable input. We will update you on our journey in continuing to define our processes within a shifting foundation. Our goal for this year's presentation is to continue to share with you our successes, methods and challenges. We believe that these conferences allow us the perfect venue to exchange information with some of the most knowledge people in the industry.

How to Transform Traditional CM Culture Into CM2 Infrastructure – A Defense Company Case Study

Cenk Onen - Engineering Director, Roketsan

Roketsan is one of the 100 largest defense company in the world. The main working area of the company is design, development and production of defense systems. Since the establishment, 1988, traditional design and configuration management methods were widely used. As the number of products and product complexities and number of projects increases configuration management activities become more crucial. This situation became more considerable by top management, when the operational feedbacks resulted in lots of corrective actions. So, Roketsan perspective changed from traditional methods to CM2 approach. However, this ongoing transformation is very painful, due to struggles in culture change and culture management. Roketsan journey from traditional to new will be explained with real life examples. Problems, issues, success stories and other fun stuff will be shared.

Entanglement of Change Process and Development Process

Martin Haket, Configuration Management Architect

Many companies struggle with their Change Process, it is perceived as slow and cumbersome by many in the organization and on top of it they are running multiple versions in parallel making it worse. This is a big contrast with the CM2 approach of using only one, fast and efficient Change Process to handle all changes in the entire company. In this presentation I'm going to look for some aspects why our Change Processes are perceived as slow and cumbersome and why nobody believes it is possible to only run one Change Process.

Training Courses

Each course registration includes attendance to the event Monday and Tuesday. All Courses begin Wednesday.

CM2-05 & CM2-06

Wed-Fri

CM2-05 Optimizing the Digital Thread

All organizations struggle with the ability to manage information accurately for the enterprise or throughout the product/solution lifecycle. This failure creates a high level of intervention resource expenditure and an inability to track fielded configurations. This drives significant warranty, recall, and concession costs that can have devastating impacts on the business. To tap the power of the Digital Thread and to facilitate a true Digital Twin, all facets of the organization and all lifecycle phases are reliant upon the Enterprise Configuration Management (ECM) process. Activities driven through the Digital Thread impact the Digital Twin with a constant barrage of changes making the ability to manage the Digital Twin that much more complex.

This course introduces critical additions to the process flows and roles previously defined in the Enterprise Configuration Management process. These additions are critical to the management of the Digital Thread and visibility of the Digital Twin in the operation and maintenance lifecycle phase. This course also identifies the differences and challenges associated with managing the Digital Twin as it progresses through each of the lifecycle phases. The role of ECM in the management of the supply chain is also shown to be critical to managing the digital thread.

CM2-06 Achieving Enterprise CM2 Implementation

Organizations continue to be disappointed with the results of efforts to implement improvements to legacy PDM, PLM, and/or ERP systems. Even when opportunities for specific improvements are identified, they struggle with the ability to achieve successful implementation. These improvement projects are oftentimes reduced in scope and still experience cost overruns and missed schedules. The negative experiences described above are also realized when an organization launches a process reengineering project. These common failures are not the problem...they are simply symptoms of an underlying bigger issue, an inability to properly manage and implement changes.

This course provides the path to achieving Enterprise Configuration Management (ECM), the enabling process needed to improve an organization's tools and other core business processes. It includes a step-by-step simulation for establishing the proper foundation to successfully implement any identified tool or process improvement opportunity. This course also shows how to evaluate the strengths and weaknesses of current business practices, where to focus attention, how to develop a transition plan, and how to manage and ensure that the project meets its stated goals and yields the intended results.

Training Courses

CM2-09 Application Workshops for Achieving Operational Excellence **Wed-Fri**

This hands-on course focuses on shifting the paradigms that are most important and also the most challenging to those implementing CM2. Course participants will perform a variety of roles and, by the end of the third day, they will have performed all facets of the CM2 process.

As Upper management, they will review an enterprise baseline and validate its content, format, naming and numbering conventions. As core business process owners, they will create enterprise operating standards and procedures and populate the enterprise baseline. As Cross-functional development team members, they will develop a product, create its design basis and hierarchy and populate its baseline.

As CRB members, they will make changes to the enterprise baseline and the product baselines. In support of supply chain specialists, they will ensure that change effectivities remain synchronized with build schedules. As Process specialists, they will transform complex work flows into closed-loop phases with each managed by a process specialist. As Part of 3-member creator/user teams, they will manage and execute individual administrative work flows and product work flows.

CM2-13 Optimizing the Software Lifecycle with CM2 **Wed-Fri**

This course describes how the CM2 model for configuration management (CM) can be applied to software. The challenge boils down to what an organization believes. Organizations either expect software code to come out right the first time, or they do not. Its process will be designed accordingly. The CM2 model is designed to ensure that code comes out right the first time. This does not mean software development is not an iterative process. It is where the iterations take place that is most important. With CM2, the customer and the developer gain a good grasp of what the overall product is going to be at an early point in its lifecycle.

With CM2, the development effort is led by a cross-functional team whose members have the full range of needed expertise. The same members serve as the Change Review Board (CRB). Change decisions are made quickly and, if approved, implemented promptly. CM2 is a waterfall model with spiraling at each level. It excels at ensuring that software design definition is clear, concise and valid. Source code is not written until the design to be achieved has been documented, validated and released by its co-owners.

Training Courses

CM2-15 Operational Excellence Bootcamp

Wed-Thurs

Students are elated when an executive joins them in the courses required for certification but time constraints are a major obstacle. The latest update of this course included a major revision to the format which enables its length to be reduced to 2 days. The format was previously the same as used in the courses required for certification. This revised format is better suited for an executive audience. About half of the 166 pages are full-page graphics taken from the most powerful illustrations from all course materials. Each illustration is backed up by a page of key points.

This course is for executives and upper-level managers. It provides an in-depth review of the IPE/CM2 model for process improvement and enables each attendee to gain a better understanding of the strengths and weaknesses of their own processes. After discussing the pro's and con's of each key point with the other attendees, those who complete this course will know precisely what they need to do.



The Hyatt Regency O'Hare and Rosemont

Rosemont is a just hop on the L-train to beautiful downtown Chicago! Visit the concierge desk for train maps and schedules. The hotel offers a Complimentary Shuttle that drops off at the Rosemont L station by request as well. Rosemont itself features lots of fantastic options for shopping and dining. Free Pace Buses are also available and provide circulator service around Rosemont to restaurants, the MB Financial Entertainment District including the Fashion Outlets of Chicago. Visit their [website](#) for all things Rosemont.

Transportation

The hotel is located directly outside of the Chicago O'Hare International Airport and provides shuttle transportation from O'Hare to the hotel - a 5 minute drive. They also offer options for transportation from the Chicago Midway Airport. Visit the hotel's [transportation page](#) for more details.

Registration

Sunday, 09/16/2018 9:00 AM – 6:00 PM

Monday, 09/17/2018 7:00AM – 8:15 AM

Exhibitor Details

Set Up:

Sunday, 9:00am – 6:00pm

Exhibitors Hours:

Monday, 7:00am – 5:30pm

Tuesday, 7:00am – 5:10pm

Exhibitor Teardown:

Tuesday, 5:10pm – 6:30pm

For more information, email deanna@ipxhq.com

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