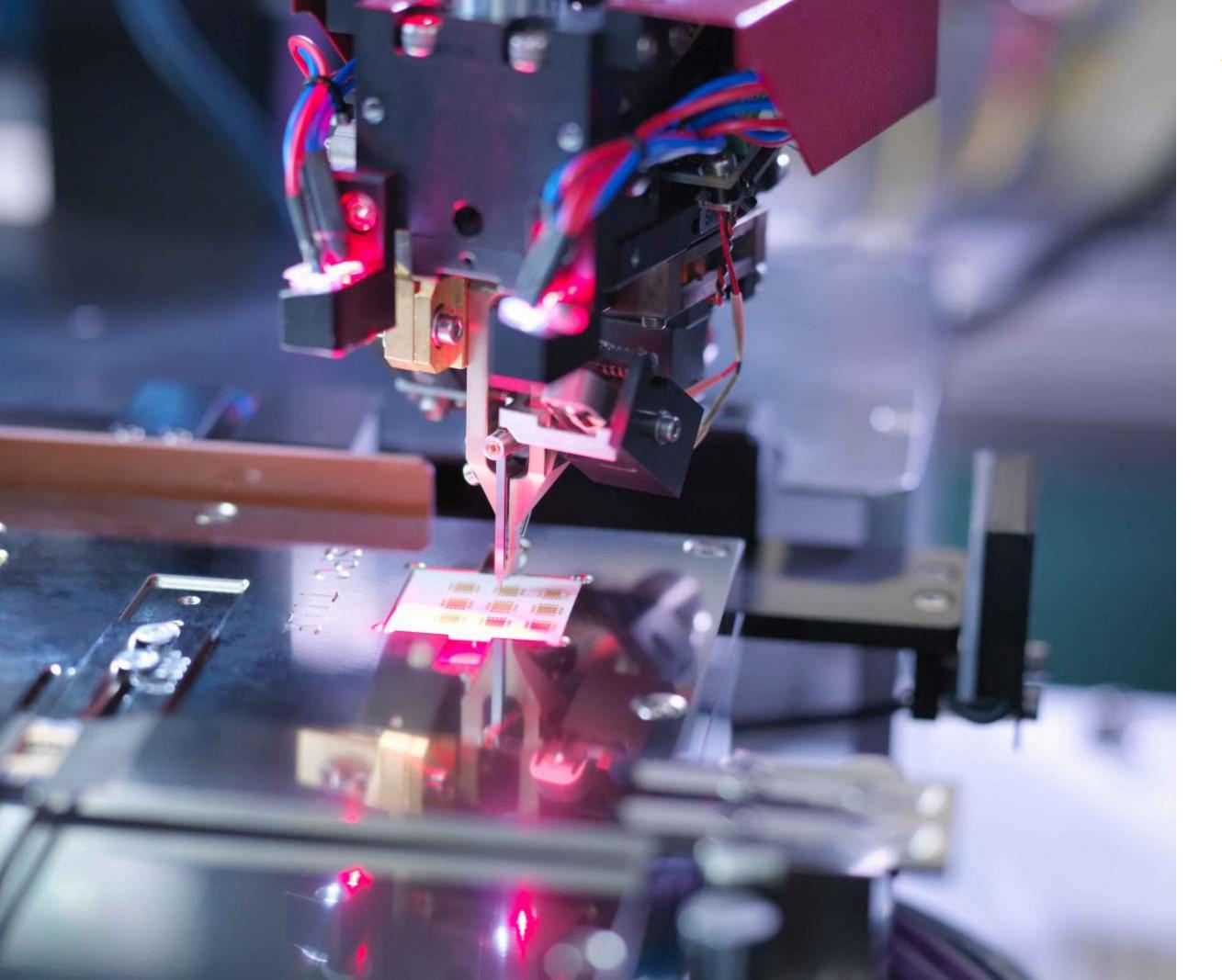


# SAP at HANNOVER MESSE, Singapore

Connect Digitally to Perfect Reality

October 16-18, 2018, Singapore





### Welcome

We invite you to join us at the SAP booth to get a deeper insight into how digital twins are connecting the physical world with the digital world. At the booth, SAP will demonstrate how this exciting technology will enable you to connect your machines within a network throughout their lifecycle, allowing you to monitor and analyse their operation. Through real life manufacturing scenarios, you will be able to see how you can get total visibility as products are designed, manufactured and deployed by connecting your business processes with real-time data from assets, equipment, customers and suppliers. At SAP booth you can visit the following pods to get detailed insights covering your end to end manufacturing journey.



#### Digital Engineering -Powered by SAP® Leonardo

- Reduce time to market
- Continuously innovate
- Deliver to customer demand



#### Digital Manufacturing -Powered by SAP® Leonardo

- Optimize manufacturing processes
- Improve collaboration with contractors
- Increase agility and responsiveness



### Digital Customer Service - Powered by SAP® Leonardo

- Manage lifecycle of physical assets efficiently and sustainably
- Predict and simulate asset behavior
- Avoid unplanned downtime



#### Digital Innovations -Powered by SAP® Leonardo

• Innovative technologies such as IOT, Machine Learning, AI, Blockchain and Predictive Analytics can generate new sources of information leading to new revenue sources and business models



#### Digital Core

 A digital core empowers companies with real-time visibility into all mission critical business processes and processes around customers, suppliers, workforce, Big Data and the Internet of Things.



### Benchmarking your digital readiness

 Leverage SAP's Next Generation Benchmarking tool to measure your organizations digital readiness to an Intelligent Enterprise.

SAP experts at the booth will be available to interact with you and explain in detail how you can leverage these solutions to reimaging your business and continuously improve processes, while generating new revenue streams, reaching once-inaccessible markets and developing new ways to stay ahead your industry.

### **Digital Engineering - Powered by SAP Leonardo**

#### MEET OUR EXPERT



Vinay V
Solution Expert

Vinay V is part of the Global Solution Management team for SAP PLM. Vinay works with the cross functional team including development, consulting, value engineering, sales & partners across the globe to position, articulate and deliver value of the SAP PLM portfolio to customers in the discrete manufacturing industry.

#### THE NETWORK OF DIGITAL TWINS

Experience the development of a network of digital twins covering the entire value chain in the Bottling on Demand concept study by Krones. At the SAP and partners stand, we show you the entire development of a digital twin. The process begins with a CAD drawing and the initial virtual prototype of a modified component.

It then continues along the entire lifecycle to manufacturing and operation of the system. The digital twin is constantly kept up-to-date with current information. In a collaborative environment, all employees involved in the development process can exchange information with one another at any time. Even at this early stage, precise cost calculations can be made and parts of the prototype can be easily produced with a 3D printer.

Even after the product is delivered to the customer, the digital twin remains a key element for subsequent processes. The virtual model of the machine is made available to the manufacturer and the operator on a shared platform. This gives the manufacturer valuable insights. Proposals for improvements or new product ideas can be sent directly to the product development team to create future requirements based on an impact analysis and functional requirements documentation. creating a constant and highly efficient innovation cycle.

## At the SAP stand, these scenarios demonstrate the new possibilities in Digital Engineering

- Accelerate and optimize the entire product lifecycle
- Precisely calculate costs and increase your margins in the early stage
- Combine mechanical, electronic, and software development
- Instantly make better decisions by monitoring operation live
- Design Collaboration and 3D Printing for prototype

### Digital Manufacturing - Powered by SAP Leonardo

#### MEET OUR EXPERT



#### **Matt Chan**

Director - Digital Supply Chain & Manufacturing, SAP Asia

With a career spanning 17 years, Matt Chan has been with SAP for 9 years now as SAP Digital Supply Chain & Manufacturing Global CoE & Director, Asia Pacific & Japan (APJ). In the past 8 years, he led business for APJ SAP Leonardo IoT & Discrete Industry Vale Engineering to drive digital transformation for new business models and processes.

Today's customers expect fully configurable, smart products. At the same time, growing competition demands shorter product cycles, accelerated response times, and highly flexible manufacturing. Many companies are having to transform and reposition themselves because of Industry 4.0. This transformation raises many questions. How can companies efficiently achieve mass customization? How are production resources provided with the required parameters via open standards? What effect do certain parameters have on key figures like OEE? How will humans and machines work together in the future?

### At the SAP stand, three scenarios demonstrate the new possibilities:

- 1. The CPQ and Commerce Cloud components of SAP C/4 HANA allow the customer to configure and individualize a product, and place the customer order. The customer order automatically initiates a production order in the SAP Digital Core, and triggers the anufacturing process automatically with corresponding BOM, routing, testing program, recipe, and so on
- 2. **Manufacturing Execution** Illustrates Industry 4.0 & Smart Factory showing business process automation from variant configuration sales order to production order, machine integration

- with multiple machine interfaces and bi-direct communication capability, and real-time shop floor visibility to improve OEE and save energy cost.
- 3. **Digital Manufacturing Cloud**presents digital manufacturing insights
  to manage and analyze manufacturing
  performance, predictive quality with
  machine learning to improve the product
  quality, and more importantly form
  insights to actions.

### Digital Customer Service - Powered by SAP Leonardo

#### MEET OUR EXPERT



#### **Ben Nottle**

Head - SAP Customer Experience Industry & Solutions, SAP APJ

Ben is a CRM pioneer and has been involved in supporting Customer Engagement related initiatives for 20 years. Ben's experience in advising CXO's on CRM adoption and supporting Customer Experience Transformation with technology has made him a trusted advisor to many SAP customers accross Asia.

Customers are more demanding than ever. As competition in the service economy increases and differentiation in saturated markets becomes more difficult, manufacturers need to focus on making customers happy. It's not simply about fixing a problem. An industrial machine out of order costs a customer thousands of dollars and with predictive maintenance, it is expected that problems will be resolved before they occur.

At the SAP stand you will see how you can use innovative Field Service Technology to:

Harmonize field service processes Accelerate and optimize service
 execution by harmonizing front office
 customer engagements with back office
 systems and processes

- Create consistent mobile experiences Keep your service technicians connected
  and informed with consistent online and
  offline mobile access
- Deliver smart analytics Create proactive service and operational efficiency with smart analytics, including Machine Learning and IoT
- Empower customers with self service -Allow customers to fix problems themselves, turn to remote assistance or schedule a field service visit without lengthy wait times
- Create an on-demand service network -Boost service performance and meet customer expectations by leveraging crowdsourcing

- Asset Intelligent Network Provide a secure environment to share assets information among, OEM manufacturers, operators, and services providers for new assets maintenance processes and new business models
- Asset Strategy & Performance Help manufacturers to create the new assets maintenance and services strategy, from reactive and preventive to conditionbased and predictive maintenance strategy

### **Digital Innovations - Powered by SAP Leonardo**

#### **MEET OUR EXPERT**



#### Satya Narayan Sahu

Senior Director, SAP Leonardo COE for Asia Pacific and Japan

He has more than 20+ years of industry experience and held positions in the Development, Solution Management, Presales, and Business Development. Satya has also co-authored 2 books on Manufacturing Operations Management: The Hitchhiker's Guide to Operations Management: ISA-95 best practices Book 1.0, and When Worlds Collide in Manufacturing Operations: ISA-95 Best Practices Book 2.0.

Digital Transformation is much more than a technology play. It's a key driver for the survival of businesses. Enterprises today must leverage innovations to improve core operations, reimagine business and create true business value.

Smart manufacturing, connected machines and product as a service are no more buzzwords. Manufacturers today are increasingly embracing the shift to digital, in response to both competitive and customer pressures. By leveraging combination of intelligent technologies including IoT, Blockchain, Machine Learning & AI, and other cloud technologies, Manufacturers today can innovate at scale and realize the vision of "segment of one".

### Proven paths to digital transformation with SAP Leonardo

There are three ways to become an Intelligent Enterprise. No matter your IT landscape or chosen path, SAP Leonardo intelligent technologies can help you make better decisions across your business – today and tomorrow.

- Optimise your business with embedded intelligence
- Extend your processes with industry innovation kits
- Break new ground with open innovation

Regardless of the path you choose, we can help you develop an end-to-end solution that delivers the outcomes you need to succeed. Put our intelligent technologies and deep industry knowledge to work for your business and customers.

### Begin your digital innovation journey with SAP Leonardo

Talk to our innovation experts from SAP Leonardo team to get a demonstration of the following innovation scenarios and discuss the right path of innovation for your organization.

- Intelligent Manufacturing in 4th
   Industrial Revolution An end-to-end
   scenario delivered through IoT,
   Blockchain, and Machine Learning which
   demonstrates the production of
   customized products in a mass
   production environment with product
   provenance.
- Pay-per-use (Beyond Industry 4.0) Once the product is manufactured, how the manufacturer can offer product as a service by combining equipment usage data from IoT sensors with Hybris billing.

### **Digital Core**

#### MEET OUR EXPERT



### Lagnajit Patnaik Director, S/4HANA Center of Excellence (CoE) SAP Asia

Lagnajit Patnaik currently leads the SAP S/4HANA Center of Excellence (CoE) at SAP Asia and is responsible for driving the Go-to- Market Strategy and Business Development initiatives for S/4HANA solution portfolio. He has over 11 years of strategy and operations consulting experience across Manufacturing and Consumer Goods sector, with a strong background in Enterprise Supply Chain and Logistics solutions

Companies can overcome complexity and drive business innovation with a digital core. A digital core empowers companies with real-time visibility into all mission critical business processes and processes around customers, suppliers, workforce, Big Data and the Internet of Things. This integrated system enables business leaders to predict, simulate, plan and even anticipate future business outcomes in the digital economy.

SAP offers a digital core that enables companies to reinvent business models and drive new revenues and profits. It enables organizations to easily connect to people, devices, and business networks in real-time to deliver new value in the digital economy.

At the digital core booth, you can experience how digital core offers you:

- A simplified architecture converting realtime data into intelligent insights and drives smarter and faster decision making
- Digital age user experience, including a voice-enabled, context-aware, businesssavvy digital assistant
- Automation of key processes are enabled through intelligence and learning capabilities powered by AI technologies, natural language, and predictive analytics

- Next-generation processes help organizations rethink the way business gets done through the smart application of technology and innovation
- With industry lines blurring, new business models are enabled with industry best practices available in one instance

### **Benchmark your Organization's Digital Readiness**

#### **MEET OUR EXPERT**



#### **Avenish Prasad**

Director, Industry Value Engineering, SAP Asia

He has more than 25+ years of experience in Manufacturing and IT industry and held various positions in Operation and Maintenance, Supply Chain, Marketing and Sales, IT Advisory and Program Management.

Business leaders have often looked to benchmarking to compare their organization's performance against industry peers and help them understand the strategic impact of their function. To address such customer needs, SAP has developed a comprehensive Next Generation Benchmarking tool, which is helping organizations measure their digital readiness to become an Intelligent Enterprise.

It also provides a performance comparison on best practices leveraged by digital leaders. The survey is available at no cost, and the participants receive results in real time.

### About SAP Next-Generation Benchmarking

SAP Next -Generation Benchmarking is a unique and differentiated approach to measure, monitor, and optimize performance and to enable the Intelligent Enterprise. It supports you to

- Understand your organization's potential
- Assess maturity on Next Generation Practices
- Connect with a Network of Industry Peers
- Compare your progress in your industry

SAP Next -Generation Benchmarking survey is developed on a modern platform designed to help organizations benchmark themselves, identify critical gaps and envision an Intelligent Enterprise.

Within 2 business days from submission, it provides you personalized insights based on top KPIs and Next Practices, aligned to the end to end value chain enabled by the power of digital technologies.

#### How to use SAP Benchmarking tools

- <u>Click here</u> link to open the bench marking tool
- Fill in the required questionnaires
- Get a customized report within two days of your submission

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