The Future of Manufacturing: Transformational Technology & Your Workforce

written by Lauri Moon | November 7, 2019

Manufacturers are implementing new technologies such as artificial intelligence, advanced automation, and data analytics to transform their operations now and for the future. While these technologies drive increased operational efficiencies and overall productivity, they also impact the workforce by providing the opportunity for upskilling and helping to attract new talent.

This webinar will explore how advanced technologies are transforming the manufacturing industry and the workforce.

During this webinar, you will:

- Learn from the Manufacturers Alliance for Productivity and Innovation why manufacturers need to be building digital strategies for the future
- Gain insight from The Information Technology & Innovation Foundation on how technology is transforming the industry
- Understand how digital transformation is changing the future of work for the manufacturing workforce

Speakers

Stephen Gold, CEO and President, Manufacturers Alliance for Productivity and Innovation (MAPI)

Stephen Ezell, Vice President, Information Technology and Innovation Foundation (ITIF)

Kylene Zenk, Director of Manufacturing Practice, Kronos

Register

Improve Operational Efficiency with a Digital Factory

written by Lauri Moon | November 7, 2019

A universal truth about manufacturing is that production is in a constant state of change. Whether changes are incremental improvements or launching new products, they often cause significant problems for manufacturers.

In fact, over 42% of companies report experiencing cost overruns and overtime as a result of change.

In this webinar, we'll discuss why the ability to adapt quickly is critical for long-term business growth. Learn how to tackle your most pervasive change-related challenges with tools purpose-built for factory planning. Topics include:

- Planning and designing a more efficient factory
- Make better decisions during construction and installation
- Operate efficiently while managing change and risk

Speaker

Jim Byrne, Product Marketing Manager, Design & Manufacturing

Jim Byrne joined Autodesk in 2013. He is responsible for product marketing for Autodesk design and manufacturing software. Jim is dedicated to the success of our customers who use our technology to design, validate, and manage their intellectual property. He has over 20 years of experience demonstrating and implementing software solutions.

Register

4IR from Buzzword to Reality: Smart Factory Adoption Rates – Best Practices and Leading Technologies

written by Lauri Moon | November 7, 2019

Companies are making progress in implementing new technologies, but scaling and linking investment to value remains a work in progress.

The Fourth Industrial Revolution – 4IR – has been met with both enthusiasm and

fence-sitting. While sentiments and experiences have been mixed, most business leaders are now approaching 4IR with a sense of measured optimism. While they recognize the potential business value advanced manufacturing technologies can present—particularly cloud computing, advanced analytics, robotics, the industrial internet of things (IIoT), 3D printing, virtual and augmented reality—they are still deliberating how and where to invest and balancing the hype with their own level of preparedness. Meanwhile, they're also well aware of the significant changes 4IR will bring to a new manufacturing workforce—one that is increasingly becoming a hybrid of human and machine.

There is little doubt that 4IR adoption has hit the tipping point, despite the fact that today only around 20% of companies are implementing smart factory technologies at scale. Momentum is building, however, as evidenced by the fact that 73% of manufacturers are planning to increase their investment in smart factory technology over the next year and 70% citing adopting an IoT strategy as being moderately to extremely critical. IoT and robotics have made the most inroads, with 80% of manufacturers planning to deploy sensors in operations over the next three years and 65% saying they've deployed applied robotics in their operations over the past three years.

About the 4IR survey

PwC and The Manufacturing Institute (the workforce and thought leadership arm of the National Association of Manufacturers), surveyed approximately 100 US-based manufacturers. Looking at the results, we see a definitive—and, indeed, inevitable—shift to 4IR as companies seek to integrate new technologies into their operations, supply chain and product portfolio. However, these companies acknowledge that scaling, justifying 4IR investments and dealing with uncertainty surrounding use cases and applications present a new set of challenges.

Join us to explore the survey findings and PwC's recommendations. Here's a sneak preview:

- While the sector as a whole is making assertive forays into 4IR, many manufacturers still inhabit the awareness and pilot phase. Nearly half of manufacturers surveyed reported that they are in the early stages of a smart

factory transition (awareness, experimental and early adoption phases). The majority of those that have implemented smart factory use cases consider a quarter to be a success.

- Manufacturers expect the transition to accelerate in the coming years—73% are planning to increase their investment in smart factory technology over the next year.
- While we see a number of fence-sitters, the bulk of manufacturers are indeed prioritizing 4IR, the digital ecosystem and emerging technologies. 35% of survey respondents says they have deployed advanced analytics in their operations and 34% have deployed it in their supply chain.
- About 70% of manufacturers say the biggest impacts of robotics on the workforce in the next five years will be an increased need for talent to manage the robotics workplace and the opening of new jobs to engineer robotics and their operating systems.

Register

Perfecting Inspection – How to

Revolutionize Design & Manufacturing Processes with GD&T

written by Lauri Moon | November 7, 2019

If implemented as part of a lean, accurate and efficient process, Geometric Dimensioning and Tolerancing (GD&T) can be a powerful tool to save time and eliminate costly errors in your design and manufacturing operations. To be effective, though, GD&T must be evaluated the RIGHT WAY for your specific industry and application.

Join our industry experts as we dive into the benefits and challenges of implementing best practices in GD&T and other metrology processes. Starting with a crash course in the basics of interpreting tolerances, we then dig deeper and show you how to avoid common pitfalls of GD&T evaluation shortcuts.

We will also demonstrate how the latest software and hardware work together to revolutionize the execution and implementation of GD&T strategies, while driving clarity and QA improvement throughout the entire development and manufacturing process.

Register

Next Gen Technologies Engaging Connected Manufacturing

written by Lauri Moon | November 7, 2019

In Industry 4.0 companies are embarking on the transformative journey. The desire to gain new business insights from data, the availability of affordable IoT infrastructure, move to the edge, AI and the advent of 5G are driving strong demand.

Hear from a panel of experts how manufacturers are transforming and how industrial solution builders can keep them ready for the era of new industrial revolution.

Topics of discussion will include:

- trends happening in a connected manufacturing world
- move to the edge, the role of IoT, AI, 5G and other emerging technologies
- ways to help your customers drive digital transformation
- the next generation OEM solutions that we modify, configure, test and optimize to fit your unique needs so that you and your customers can maintain a competitive "edge."

Speakers

Greg Moore, OEM Enterprise Technologist, Dell Technologies OEM & IoT Solutions

Greg Moore is the "OEM Enterprise Technologist" for the Dell Technologies OEM & IoT Solutions organisation in the EMEA Region. The Dell EMC OEM team is a Global Engineering & Sales organization, setup to enable customers to integrate the extensive portfolio of Dell Technologies, into the Operational Platforms and Solutions they develop. OEM also provides services for global logistics, global

support, product customisation & trade compliance, product rebranding and a specialised rugged portfolio.

Greg supports verticals such as Industrial Automation, Marine, IoT, Space, Surveillance, Transport, Health & Life Sciences and Energy, therefore offering the Defense Industry with insights & trends from across many markets. He has been in the IT industry for over 30 years, lives in Dublin Ireland, with his wife and two children.

Harry Forbes, Research Director, ARC Advisory Group

Harry Forbes is a Research Director with ARC Advisory Group based in Boston. Harry leads ARC's coverage of DCS and industrial networks. He contributes to ARC coverage of process automation and the Industrial Internet of Things (IIoT). Harry is also an expert in the electric power vertical industry. Harry has over 30 years of experience in process automation, electric power generation, energy management, modeling and simulation, advanced control, and optimization. He has written for many industry and trade magazines, as well as for many technical and industry conferences.

Prior to joining ARC Advisory Group Harry served in a variety of marketing, sales and engineering posts for Simsci-Esscor, Invensys, and Foxboro. He also worked as a performance and automation engineer in fossil and nuclear power generation at the Detroit Edison Company. Harry is a graduate of Tufts University with a BS in electrical engineering and has an MBA from the Ross School of Business at the University of Michigan.

Spencer Doyle, Vice President – Industrial Platform, Noodle AI

Spencer is a life-long client services practitioner. His guiding metric for success in business is his client's own success. A student of data and analytics for his entire career, Spencer spent fifteen years at MicroStrategy playing an active role in every directorate in the organization. Spencer developed a keen sense of how organizations use data to empower executives to make informed business decisions. He parlayed his skills to develop, consult, and sell analytic software and services to clients across the Fortune 2000, becoming a multi-year top global performer and

client development leader. Before joining Noodle.ai, Spencer worked as the Director of Sales for Platfora, a big-data software analytics company headquartered in Silicon Valley. Spencer graduated from Dartmouth College and trained extensively with the Royal Shakespeare Company in London before starting his career in technology. When he's not out-and-about with clients, friends, or family you'll find him playing golf anywhere he can find a course and time to play.

Digital Manufacturing: Driving Product Innovation and Personalization

written by Lauri Moon | November 7, 2019

Today's manufacturers are faced with a competitive environment that demands more innovative, unique, highly-configured products and services designed to fit customers' specific needs. Of course, this has a significant impact on the way that these manufacturers design products and manage customer communication as they build quotes and deliver on promises. Does your organization have what it takes to differentiate itself through customer engagement?

In this webinar, Infor's Director of Industry and Solution Strategy, Nick Castellina, and Vice President of Strategy for Infor Configure Price Quote, Ron Eismann will discuss the importance of customer communication for meeting manufacturer's needs. You'll learn:

- The major trends that are impacting manufacturers today
- Best practices for managing the quote-to-order process
- Strategies for linking design and delivery
- Tips for devising a digital transformation strategy focused on innovation

Speakers

Nick Castellina, Director of Industry and Solution Strategy, Infor

Nick Castellina is Director of Industry and Solution strategy where he is responsible for marketing messaging and strategic direction in the discrete manufacturing industries. At Infor, Nick interacts with end users to understand their challenges and connects with product management and marketing to support Infor's commitment to delivering focused solutions featuring industry best practices. Prior to Infor, Nick was Vice President and Research Group Director of the Aberdeen Group's Business Planning and Execution research practice. There he worked with software vendors and end users to analyse trends and produce industry-leading content in topics related to Enterprise Resource Planning, Enterprise Performance Management, Project Portfolio Management, and Business Process Management.

Ron Eismann, Vice President of Strategy, Configure Price Quote, Infor

Ron Eismann is Vice President of Strategy for Infor Configure Price Quote (CPQ). In this role, he is responsible for setting the product direction and go-to-market strategy for Infor CPQ. Ron has more than 25 years of experience in the enterprise software market, including 20+ years of experience with CPQ solutions.

Register

Supercharging Your Safety Program with Hazards & Observations Mobile Technology

written by Lauri Moon | November 7, 2019

This webinar will teach listeners how to turn frontline employees into safety superheroes through mobile applications. The potential of technology will be linked to the reality of EHS managers and frontline staff, including tips on how to evaluate software solutions.

By watching this webinar, you will learn:

- Best practices when implementing a hazard identification program
- How mobile technology can enhance your hazard identification program
- Reality vs. Hype: How technology engages frontline workers
- Top things to consider when evaluating mobile technologies

Speaker:

Amy McNaughton, EHS Professional, Intelex

Amy McNaughton started as a consultant and EHS professional in operational and

exploration mining and is now employed at Intelex – a leading EHS software provider. Amy has spent over 10 years on the front line of health and safety in everything for underground mines, oil and gas facilities, manufacturing plants and retail facilities. Her focus has always been around safety culture and building behavior focused training and open communication environments. Amy has worked on 3 continents, lived in the most remote parts of the world and has been responsible for the safety and culture of the projects she manages.

Sponsored by:

Industry 4.0 – Believe the Hype

written by Lauri Moon | November 7, 2019

In 2018, OSHA reported 5,147 work-related deaths in the United States. In 2017, a study by Zappix, Inc., indicated slow customer service as the contributing factor in a $75B revenue loss. Energy.gov states that 30% of energy used in average commercial buildings is wasted.

These seemingly disparate data points have one thing in common: all are among the most common industry-wide business problems organizations seek to solve.

Expertise and technology are available today to help companies move forward. The digital era is here. But where to begin?

In this webinar, you will hear about Hitachi and Oracle's joint approach to the Internet of Things (IoT) – asset monitoring, production monitoring, connected worker and optimized factory. Hear how to identify a use case, which is the cornerstone of any successful IoT initiative, learn the questions to ask about capturing data, see examples of customer successes, watch a solution demo and share in a Q&A with our panel of experts.

Every company is impacted by the digital age. In the past 15 years, 52% of Fortune 500 companies have disappeared from the list. And it is estimated that 40% of all business will fail in the next 10 years due to digital disruption. Let's talk about how you begin or proceed along your path to solving business problems with IoT.

Speakers

Ellen Dowd, Keynote Speaker, Senior Vice President, Solutions – Hitachi Social Innovation Business Unit

Ellen Dowd is the Senior Vice President of Solutions for Hitachi's Social Innovation Business. Whether focused on global sustainability issues around water and energy management or urban mobility challenges facing the world's most dense populations, Ellen's focus remains on sustaining Hitachi's culture of innovation and commitment to making the world a better place—all while breaking into new digital markets. Ellen has 20+ years of experience in consulting, primarily focused on helping clients drive results and change their business models through the adoption of innovative technologies. Ellen has advised C-level executives at more than 40 companies on the Global 2000 and has a track record of defining and executing successful strategies for using emerging technologies to deliver meaningful business outcomes. She has been recognized by the industry in a number of ways, including being named one of Dallas' Top 25 Women in Technology by the Dallas Business Journal, and the Best Woman Sales Director in the US by WISA. Through these recognitions—as well as through numerous speaking engagements throughout her career—Ellen has established herself as a passionate and successful business leader in the technology field.

Jai Suri, Thought Leadership Speaker, Senior Director, Product Management, IoT Cloud – Oracle

Jai is Senior Director of Product Management, responsible for product strategy and technical roadmap of the Internet of Things (IoT) Cloud offerings from Oracle. Jai leads definition of vision and product strategy for IoT at Oracle leveraging cloud and predictive analytics solutions with the goal of making IoT easy for achieving business outcomes. He is a digital transformation strategy expert with a focus on application of emerging technologies (IoT, Data Analytics, Machine Learning, Mobile) to modernize enterprise application environments such as ERP, Supply chain and CX. He has over 18 years of experience in various roles including product management, engineering management, technology leadership and software development for enterprise markets. In 2016, Business Insider recognized Jai as one of 26 rock-star engineers changing the company. Jai holds a Master of Software Management degree from Carnegie Mellon University and a Bachelor of Engineering degree in Instrumentation and Process Control from University of Pune.

Viktor Sahakian, Thought Leadership Speaker, Vice President, Oracle Technology – Hitachi Consulting

Viktor Sahakian leads Hitachi Consulting's Oracle technology practice and has over 25 years of consulting experience with applications development, implementations and systems architecture. He has directed and provided project management and technical leadership on multiple global implementations and transformational projects. He has in-depth knowledge of Oracle E-Business Suite and Oracle database architecture, installation and configuration. His current focus areas are cloud based SaaS, PaaS and IaaS transformations.

Gloria Kunik, Host & Moderator, Leader, Americas Alliances & Channels

Gloria is Leader of the Americas Oracle Alliance for Hitachi Consulting. In this role, she has responsibility to expand and enhance the Hitachi/Oracle partnership by positioning new solutions and strategic go-to-market synergies, including those for IoT and other emerging technologies. Her 20-year background with the Oracle ecosystem includes delivery leadership, delivery and business consulting, sales and

sales enablement and alliances. Prior to joining Hitachi, Gloria held several positions in the Oracle technology consulting industry, including implementation consulting, delivery leadership, solution leadership, industry expertise and sales.

Register

POLCA: The Production Control System for High-Mix, Low-Volume and Custom Products

written by Lauri Moon | November 7, 2019
CLASS IS FULL – REGISTRATION IS CLOSED

This half-day workshop will explain POLCA (**P**aired-cell **O**verlapping **L**oops of **C**ards with **A**uthorization), an alternative to Kanban for material control on the shop floor. POLCA is a card-based visual control system that manages the flow of jobs through the shop floor: at each operation, it controls which job should be worked on next to meet delivery targets. POLCA ensures that upstream operations use their capacity effectively by working on jobs that are needed downstream, while at the same time preventing excessive work-in-process (WIP) build-ups when bottlenecks appear

unexpectedly.

POLCA is particularly suited to companies manufacturing high-mix, low-volume and customized products, for which Kanban systems do not work well. Such companies struggle with long lead times, late deliveries and daily expediting to meet delivery dates. POLCA has delivered impressive results in such environments.

The crowning aspect of POLCA is that it is simple. It does not require any complex software implementation: it can be used without an ERP system or it can seamlessly complement an existing ERP system.

The workshop will begin with a tutorial on POLCA, followed by a computer simulation demonstration of POLCA. The class will include several case studies of industry applications, as well as an overview of Suri's new book on POLCA (see below).

The workshop includes:

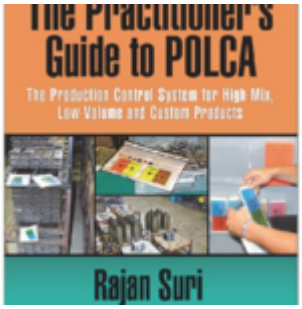
- **The Need for a New Material Control Strategy:** Why MRP systems can result in an increasing spiral of long lead times and late deliveries and why concepts such as takt time and Kanban do not work well in low-volume or custom environments.
- **Detailed Explanation of POLCA:** POLCA stands for **P**aired-cell **O**verlapping **L**oops of **C**ards with **A**uthorization. This hybrid push/pull system combines the best features of card-based pull (Kanban) systems and push (MRP) systems while overcoming their drawbacks for low-volume and custom production.
- **Computer Simulation of POLCA:** A computer simulation will be used to demonstrate how POLCA works for a company making low-volume and custom-engineered products.
- **Overview of new book on POLCA:** Attendees will get a "walk-through" of Suri's new book to provide them with an overview of the contents and tips on how to best use the book.
- **Industry Case Studies of POLCA Application:** Several industry case studies will be presented to show the effectiveness of POLCA for companies in many different industries, including applications in USA, Canada and

Europe.

In summary, through the theory and examples in this workshop, attendees will see the impact of POLCA on product lead times and on-time delivery and learn how POLCA can provide companies with a powerful competitive advantage.

** **Bonus** **

Attendees will receive a copy of Suri's newly published book:



The Practitioner's Guide to POLCA: The Production Control System for High-Mix, Low-Volume and Custom Products By Rajan Suri, Productivity Press, 2018.

Instructor:

Rajan Suri is Emeritus Professor of Industrial Engineering at the University of Wisconsin-Madison. He received his Bachelors degree from Cambridge University (England) and his M.S. and Ph.D. from Harvard University. Professor Suri is the Founding Director of the Center for Quick Response Manufacturing (QRM) at the University of Wisconsin-Madison, through which around 300 companies have worked with the University on developing and implementing QRM strategies. Click here to learn more about Professor Suri.

****Currently only accepting registrations for a minimum of three, maximum of five attendees per company.**** **This training qualifies for WEDnetPA funding as Essential Skills Training.**

Quick Response Manufacturing (QRM)

written by Lauri Moon | November 7, 2019

EVENT IS FULL – NO LONGER TAKING REGISTRATIONS

A Competitive Strategy for Low-Volume and Custom-Engineered Products

Quick Response Manufacturing (QRM) is a companywide strategy for lead time reduction throughout the enterprise. Using QRM, companies have reduced their lead times by 80-90%. As a result, these companies have not only seen large increases in market share, but also experienced 15-20% cost reduction and huge quality improvement. Although Lean Manufacturing techniques can be powerful in certain situations, for companies making low-volume or custom-engineered products, Lean techniques do not always apply well.

QRM can be a more effective, competitive strategy for companies targeting such markets. In addition, companies find that the lead time and cost reductions r4esulting from QRM enable them to compete effectively against low-cost countries.

This workshop will consist of two parts:

- An Overview of QRM Principles & Strategy
- Practical, Hands-on Manufacturing Critical-path Time (MCT)-Mapping Exercises

Overview of QRM Strategy

1. **The Power of Time:** The non-obvious reasons why lead time is important

(much more important than most managers realize), how it influences total operating cost and quality and how to take advantage of this realization.

2. **Organizational Structure:** How to restructure your organization to minimize lead time throughout the enterprise.
3. **System Dynamics:** How interactions between machines, people and products impact your lead times. As a result, capacity planning policies (e.g. machine and labor utilization) and lot sizing policies need to be rethought for QRM.
4. **Enterprise-wide Application:** QRM is not just a shop floor approach; it is applied throughout the organization. This includes material planning and control, purchasing and supply chain management, office operations such as estimating and order processing and new product development. You will also see data on the "bottom line" impact of QRM on product cost, quality and lead times.

Using MCT-Mapping to Identify Lead Time Reduction Opportunities

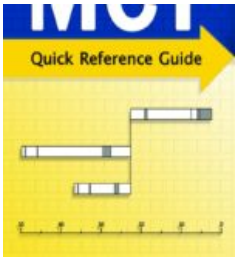
In partnership with colleagues from major corporations, Suri has developed the concept of Manufacturing Critical-path Time (MCT), a precise metric, which highlights improvement opportunities by clearly quantifying system-wide waste. The metric can be used for both your internal operations as well as for your supply chain.

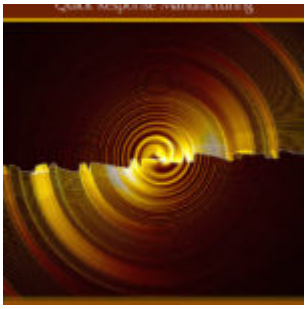
In this portion of the workshop, you will first learn the detailed definition of MCT and understand the business case for using MCT. You will learn how to calculate MCT correctly for various situations by working on numerical examples. You will learn how to use MCT-Mapping to communicate opportunities and convince management. You will also learn the differences between MCT-Mapping and Value Stream Mapping (VSM) and see why MCT-Mapping more clearly identifies opportunities for lead time reduction.

Both parts of this workshop will combine theory with practical examples using case studies of many companies that have implemented QRM in both USA and Europe.

**** Bonus ****

Attendees will receive a copy of Suri's books:





It's About Time: The Competitive Advantage of Quick Response Manufacturing and *MCT Quick Reference Guide*.

Instructor:

Rajan Suri is Emeritus Professor of Industrial Engineering at the University of Wisconsin-Madison. He received his Bachelors degree from Cambridge University (England) and his M.S. and Ph.D. from Harvard University. Professor Suri is the Founding Director of the Center for Quick Response Manufacturing (QRM) at the University of Wisconsin-Madison, through which around 300 companies have worked with the University on developing and implementing QRM strategies. Click here to learn more about Professor Suri.

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