Concurrent Sessions

Monday, May 8

Bridging the Gap: Connecting Quality Control to Quality Assurance for Smarter Manufacturing
9:45 am-10:30 am

Presented by: Jamie Fernandes, ETQ
Area of Focus: Supplier and Supply Chain Management
Session Level: Intermediate

A critical gap to the fulfillment of the Smart Manufacturing promise is the gap between finished product quality control (QC) and in-process quality assurance (QA). By filling this gap with advanced technology that can automate the process of delivering QC data to a comprehensive QA software platform — also known as a Quality Management System (QMS) — organizations can catalyze a cycle of continuous improvement and drive quality concerns further upstream in the manufacturing process. You'll learn how quality can drive autonomous manufacturing by becoming connected and data-driven. You'll understand, from a company already experiencing the ROI, the immediate benefits of Smart Manufacturing technologies and QMS software working together. You'll learn how your organization can improve end-product quality, speed up new product introduction, and make Smart Manufacturing a reality by:

- Driving quality initiatives in manufacturing further upstream in design, engineering, and supply chain management processes to initiate a cycle of sustainable continuous improvement
- Minimizing risk in inferior product releases by automatically preventing product releases if issues are found
- Preventing poor data quality by aligning with existing data in external systems, such as product, supplier, customer, etc.
- Creating a data foundation for digital transformation and Industry 4.0

Demonstrating the Functional Strategic Relevance of Quality with Hoshin Kanri
9:45 am-10:30 am

Presented by: Jd Marhevko, ZF Group
Area of Focus: Quality's Impact on Leadership, Org Excellence, and Inclusion
Session Level: Intermediate

Can you demonstrate your functional relevance? How do you prove what you and your team can bring to the business? This hands-on session helps participants leverage their soft skills to demonstrate the strategic relevance of their Quality System through the use of Hoshin Kanri. You will learn how to align your strategy to that of the business and then transform the resultant initiatives into agile, tactical actions. This method is used successfully by multiple types of organizations to achieve benchmark quality systems. Participants will create and take home a small working sample relevant to their unique business environment. Managers will see how they can visualize, articulate and execute a plan to meet their quality goals and objectives via Hoshin Kanri.

Dynamic Pareto application for synthesizing complex data to extract quality insights for improvement
9:45 am-10:30 am

Presented by: Srihari Chodagiri, Carl Zeiss Vision Inc
Area of Focus: Quality's Impact on Leadership, Org Excellence, and Inclusion
Session Level: Intermediate

With increasing complexity in the amount of data that quality teams nowadays have to deal with, bolstered by both advanced manufacturing information systems and dwindling size of personnel available to synthesize complex data, the age-old problem-solving & data analytics tools are clearly up for further refinement. This is not a presentation that showcases flashy display charts and tools as with analytics such as Power BI, Tableau, etc, but something that touches on the core concepts of basic quality analysis tools such as Pareto trend charts. Few people realize the simplicity with which these tools are made, and for ages, these simple tools continued to help quality professionals make great improvements in building quality culture in their organizations. In optics, there are close to 100 quality variables for a small product as spectacles, with a majority of them having an equal probability to end up as defect reason. Here the author attempts to showcase a small refinement into Pareto charts (I would like to name it Dynamic Pareto) that helped to better synthesize this complex quality data that is replete with a very high number of quality variables and one that helped bring down the breakages and remakes from customers.

Grow, Cultivate, and Prosper Your Career in Quality - All Industries Need You!
9:45 am-10:30 am

Presented by: Teresa Whitacre, Marketech Systems
Area of Focus: Emerging Professionals in Quality: A Career Primer
Session Level: Intermediate

Grow, Cultivate, and Prosper Your Career in Quality - All Industries Need You! Is for industry professionals of all career levels, no matter what commodity or service the business offers. Quality exists and is needed everywhere! Whether you are just starting your career, in the middle looking for advancement, or a well-seasoned professional looking to firm up skills or make a change, this discussion is for you. The presenter offers practical applications from a 30-plus-year quality career. In addition, the presenter will offer tools from some of her most popular Career Coach columns, which you can use to further your career. DMAIC, lean, apps, and software used in today's markets are just a few of the topics to be touched upon. Discussion on effective career planning will be included – it's YOUR career and YOUR responsibility! There will also be a brief discussion on mentoring and why it is so important.

Technical Writing: How to Write Instructions People Can and Will Follow
9:45 am-10:30 am

Presented by: Leslie O'Flahavan, E-WRITE LLC
Area of Focus: Risk, Resilience, and Sustainability Tools
Session Level: Basic

You may be thinking, "I'm a quality professional, not a technical writer", but anyone who writes instructions or brief documentation is a technical writer (at least temporarily). Sometimes, you're writing a set of brief instructions in an email response to a colleague. Other times, you're writing a getting-started guide that will help new employees begin using an online system. Whether you're writing formal documentation or an informal how-to, this session will show you how to write instructions people can follow. In this session, you'll learn repeatable, invaluable instruction writing skills, including how to begin each step with a verb, when to number steps and when to use bullets, and how to write a set of instructions that is useful for first-timers and experts alike. Well-written instructions enable self-service and free you of the drudgery of answering the same questions repeatedly, whether from colleagues or customers. Instructions are also "use now and save-for-later content", so the time you spend writing easy-to-follow instructions now will pay dividends when users refer to your instructions later.

The Americans with Disabilities Act - Why Should We Care?
9:45 am-10:30 am

Presented by: Lori Daly, Diversifi Consulting Group, LLC & Leigh Ann Schildmeier, Park Avenue Solutions
Area of Focus: Quality's Impact on Leadership, Org Excellence, and Inclusion
Session Level: Basic

Respect for People is a principle that is inherent to lean. Yet, whether considering employees or customers, there's a huge segment of the population that many organizations overlook. The largest minority group in the U.S. is a population not specific to any race, gender, or age group. Numbering over 61 million, one in four adults, American adults with disabilities comprise the third largest U.S. market segment and a largely untapped pool of talent. Beyond complying with the legal responsibilities established by the 1990 Americans with Disabilities Act (ADA), every organization stands to benefit from creating an inclusive culture for both customers and employees. Participants in this session will gain an understanding of the key principles and requirements of the ADA, including the use of standard processes to increase diversity and inclusion. We'll also discuss the lean principle of Respect for People, especially as it relates to building trust and engagement within your workforce, a vital component to attracting and retaining valuable employees.

Creativity - An Essential Skill for the Future Quality Professional
10:45 am-11:30 am

Presented by: Edwin Garro, PXS Global & Ruth Stanley, Boann Consulting
Area of Focus: Emerging Professionals in Quality: A Career Primer
Session Level: Intermediate

Creative thinking is an important skill in today's uncertain world and imperative for the future success of upcoming quality professionals. With Industry 4.0 and its new ways of working, we need new ideas, new processes, new products, and new ways of relating to one another. We need to do what humans are uniquely formed to do – create. Creativity is not just a talent for the select few, it is a skill that we can all tap into in our own way. As quality professionals, we can help our colleagues find the source of their own unique brand of creativity and how to exercise their passion, problem-solving ability, and curiosity. Expand your quality toolbox. Join us to learn systematic techniques to achieve continuous improvement and breakthrough ideas.

**Schedule as of March 30, 2023
Subject to change.**

Learn more and register at
https://asq.org/conferences/wcqi/registration

Financial Impact of Quality Improvements
10:45 am-11:30 am

Presented by: Michael Huyett, W.R. Meadows
Area of Focus: Quality's Impact on Leadership, Org Excellence, and Inclusion
Session Level: Intermediate

Quality Assurance and Finance departments are both numbers-driven teams, but that doesn't mean they speak the same language. Proposing improvements with incomplete financial information and reviewing the proposals with an incomplete understanding of quality measurements can create obstacles to planning, financing, and implementing improvement activities. Quality Assurance speaks to defects per million and complaint rate, whereas Finance talks about payback, internal rate of return, and net present value. Quality and Finance often come to different conclusions when considering project priorities. By applying tools to bridge the language barrier between quality and financial numbers, consensus to fund process improvement or a complaint reduction change becomes easier. One such tool, the decision tree, can help not only the quality and finance teams, but other stakeholders see the benefits or potential shortfalls of projects both before they are launched, and again before implementation. By simply understanding that there is a difference in how stakeholders evaluate proposed improvements, and using tools to make the numbers common for all, the financial impact of quality improvement will begin to take shape and earn more merit

Lean Where You Least Expect It - Developing Personal Lean Habits at Home, at Work, and in the World
10:45 am-11:30 am

Presented by: Manny Veloso, CI Consulting Services & Howard Zwick, Z Operations Solutions
Area of Focus: Quality's Impact on Leadership, Org Excellence, and Inclusion
Session Level: Intermediate

Lean Where You Least Expect It highlights lean habits that can be applied to personal workflows. It helps participants identify opportunities to save time and reduce stress in their lives. The intent of this presentation is to expose people to lean opportunities available at work, as well as the other two-thirds of the week spent outside of work. Lean is more than a methodology to be used in manufacturing and work environments. lean thinking can and should be applied to processes in office and service-related industries, as well as in your personal life. Learn and share ideas that participants can use today to make life more lean. Discover three uses for the Windows key and many more practices that will change your daily workflows. Learning objectives:

- Develop personal Lean habits at home, at work, and in the world

- Learn ways to save time and reduce stress in your life
- Recognize lean opportunities when they occur in the future

This presentation is applicable to all industries and levels of lean practitioners. Lean Where You Least Expect It - developing personal lean habits at home, at work, and in the world.

Managing the Tension Between Planning and Reacting
10:45 am-11:30 am

Presented by: Gauthier Duval, Veryable
Area of Focus: Supplier and Supply Chain Management
Session Level: Advanced

Managing your supply chain is a complex undertaking. In this session, we'll explore the balance between planning and agility. Traditionally, the focus of supply chain professionals has been on improving the quality of planning processes and methods. However, the first principle of forecasting is that "forecasts are wrong most of the time". When we overestimate demand, we incur inventory costs, and when we underestimate demand, we incur lost sales. It is therefore possible to calculate the cost of forecast inaccuracy, and you will be shown a method to achieve this. The alternative to planning is to focus on increasing flexibility. This is the lean saying that "TPS (the Toyota Production System) is like a method to always win at the horse races". In lean, however, there is no true "just-in-time". Rather, there is a production leveling that is used to compensate for the rigidities in the system. To overcome the tension between planning and reacting, you will be introduced to a new concept: full just-in-time, and a method to determine the best tradeoff between planning and flexibility.

The ASQ Standards Process
10:45 am-11:30 am

Presented by: Brenda Bishop, Retired
Area of Focus: Risk, Resilience and Sustainability Tools
Session Level: Basic

Did you know ASQ is the lead US organization on ISO 9001, ISO 10001, Z1.4, and Z1.9? Come learn how national and international standards are developed, what ASQ's role is in the process, and how you can contribute and benefit from this involvement.

Use ISO Standards to Advance Diversity & Inclusion and Gain Performance Benefits
10:45 am-11:30 am

Presented by: Jeff Witte, DNV
Area of Focus: Quality's Impact on Leadership, Org Excellence, and Inclusion
Session Level: Basic

Diversity and inclusion (D&I) is fast rising on corporate agendas. Most companies are in the early stages and have yet to connect it to their business and innovation. Research increasingly demonstrates the business benefits. As per McKinsey (1), ethnically diverse organizations are 36% more likely to outperform those less diverse, gender-diverse companies by 25%. A DNV survey(2) found companies concentrate on internal, and organizational aspects and few take a structured approach to develop, implement and measure actions. Is there a way to progress on such a complex topic and gain significant benefits? For companies serious about advancing, integrating, and capitalizing on D&I, existing knowledge and experience with standards, systems, and certification may be the answer. The same path, logic, and benefits gained from working on quality, environmental or safety can be applied to D&I. ISO 30415– Human Resource Management – Diversity and Inclusion is a specific guidance standard for D&I. It provides a framework to integrate D&I into company processes, shedding light on the entire employee life cycle. Join Jeff Witte, Executive Director Sales North America in DNV to learn more about diversity & inclusion in the company context and how ISO 30415 can unlock your company's potential.

Dangers of Digitization – Building a Culture of Players, Not Spectators
1:00 pm-1:45 pm

Presented by: Shane Yount, Competitive Solutions, Inc.
Area of Focus: Quality's Impact on Leadership, Org Excellence, and Inclusion
Session Level: Intermediate

By 2023, data literacy will become an explicit and necessary driver of business value, demonstrated by its formal inclusion in over 80% of data and analytics strategies and change management programs. The importance of correct measurements and specific action on those measurements is the driving force of success. In this session, you will learn the key elements to create a culture that is engaged and uses metrics to drive the business forward.

Enhanced CI work with App-based project management software; Part 2 "The rest of the story"
1:00 pm-1:45 pm

Presented by: Chad Smith, Continuous Improvement Solutions, LLC
Area of Focus: Emerging Professionals in Quality: A Career Primer
Session Level: Intermediate

Organizations are continuing to explore new avenues and stretch their application of continuous improvement. In 2022, we reviewed the work of Air Hygiene International as the company decided to enhance its continuous improvement work by implementing an app-based project management software. Well, news travels fast. After adopting and implementing the software and process in their construction services and instrumentation functions, finance became super interested. This led to finance learning about the tool and the construction services/ instrumentation functions teaching the tool to the finance team. Finance now is currently expanding the use of the tool to support and automate its contracting and billing functions. In this presentation, we'll catch up with the folks who missed the presentation in 2022, as well as tell the rest of the story of further deepening of application across 2022 into 2023.

Leadership and Culture- How Do You Measure Culture?
1:00 pm-1:45 pm

Presented by: Laura Kinney, Performance Excellence Mentor & Michael J. O'Brien, The BuePrint Toolset
Area of Focus: Quality's Impact on Leadership, Org Excellence, and Inclusion
Session Level: Intermediate

This presentation features two experts with different backgrounds coming together to offer structure and guidance on understanding and building a culture that promotes, supports, and delivers excellence and results. The presentation will include concepts from the Baldrige Framework for Performance Excellence and the BluePrint Tool Set that can be easily used to measure and improve the culture and leadership of organizations. High-performing organizations that use the Baldrige Framework for Performance Excellence are asked the question, "How do you create an environment that supports and demonstrates high performance?". Usually, employee satisfaction data is used, which has some valuable information, but there is an even better approach. Not only is culture important in strategy deployment, but also in any transformation, including lean and other quality approaches. And, a little bit of neurology will also be integrated into the presentation!

Societal Excellence Is Where We Go From Here
1:00 pm-1:45 pm

Presented by: Kerry Bass, Potential To Reality Consulting LLC
Area of Focus: Quality's Impact on Leadership, Org Excellence, and Inclusion
Session Level: Intermediate

In this presentation, we will discuss how the core principles of defect elimination and variation reduction helped manufacturing, and then services in the societies of the earlier industrial ages. These concepts formed the foundation of our value creation as a profession by reducing waste, rework, and the need for mass inspection. Further, advanced data analytics, machine learning, and automation capabilities of the 4th Industrial Age are further reducing the need for organizations to devote people resources to managing the quality of goods and services. This allows the quality profession to build on the foundations of the past and apply our thinking and skills to address needs at the societal level.

Unlocking the Challenges of Change
1:00 pm-1:45 pm

Presented by: Tim Creasey, Prosci
Area of Focus: Quality's Impact on Leadership, Org Excellence, and Inclusion
Session Level: Basic

Change is hard. Change is continuous. Change success is accessible. Successful change of any kind has two sides, a technical side, and a people side. The technical side is where we design, develop and deliver a solution to meet a need. The people side is where we enable our people to engage, adopt and use the change. The change landscape is plagued with examples where the technical side of the change was flawlessly executed, but the people side was neglected. As a result, the organization making the change realized little or no value. In this keynote, we explore how to unlock successful change outcomes with and through our people. You will learn how to not leave change to chance by preparing, equipping, and supporting individuals through their journeys.

Where is the harm in that?
1:00 pm-1:45 pm

Presented by: Lance Coleman, IDEX Health and Science
Area of Focus: Risk, Resilience and Sustainability Tools
Session Level: Basic

Risk Elimination. Risk Management. Risk Mitigation. These words are an increasingly important part of the lexicon of executive-level management as they strive to succeed in a business environment having global competition, geographically diverse suppliers, and new technologies. During the past decade, there has been an increasing emphasis by regulators on risk management at manufacturers throughout their processes and flowing down those requirements to their suppliers. During this session, an overview of US and international regulatory and ISO/IEC requirements for risk management of medical devices will be provided. We will come to understand the important role that risk-based thinking plays in medical device risk management. Also, the most commonly used risk management tools to be used singly or in conjunction with one another will be discussed. Learn exactly what is a layered risk response. Lastly, we will share how to best determine acceptability criteria for overall residual risk.

Appetite for Reduction (of Regression Models)
2:00 pm-2:45 pm

Presented by: Stephanie Parker, Boon Edam
Area of Focus: Emerging Professionals in Quality: A Career Primer
Session Level: Intermediate

When using multiple linear regression, most experimenters will find that in the initial model, one or more of the input variables will not be statistically significant. The next step should be to eliminate non-significant terms to reduce the model. But, what is the best way to approach this? Many Six Sigma training courses cover how to build a multiple linear regression model but do not provide instruction on model reduction techniques. This session will review and demonstrate some best practices that experimenters can use to find the best subset model from a full multiple linear regression model.

Changing the Game: Eight Approaches to Innovation
2:00 pm-2:45 pm

Presented by: John Dew, Troy University
Area of Focus: Quality's Impact on Leadership, Org Excellence, and Inclusion
Session Level: Basic

Quality practitioners use quality improvement methods to study and systematically improve specific processes - which can be described as improving how the game is played. Innovation is about changing the nature of the game being played. This presentation provides an overview of eight well-researched approaches to game-changing innovation that quality practitioners can use. Some of these approaches are spontaneous while others are systematic.

Corrective Action - A Good Thing
2:00 pm-2:45 pm

Presented by: Robert Napoletano, SRC, Inc.
Area of Focus: Risk, Resilience, and Sustainability Tools
Session Level: Intermediate

Does your company view corrective action as an opportunity to improve or just more work? Does your corrective action process include employee engagement? Is it timely? Do your employees fully understand the corrective action process and the tools used? Corrective Action is often thought of as a bad thing. You found something wrong and now you need to spend resources to fix whatever caused the problem. The problem found impacts current plans for production, profits, employee morale, and perhaps even customer relations. So corrective action is a bad thing? To that end, we should be looking at corrective action as a step in our overall improvement process. While it is reactive in nature, if we look at corrective action in a positive light, we can see that if done right the problem will not surface again, we can apply the lessons learned to other products or systems so they too won't cause similar problems, and if done correctly it engages the workforce in the improvement process, spreading trust and loyalty in the company.

Filling the Gap: Using Drop-in Assessments to Assess Compliance between Audit Cycles
2:00 pm-2:45 pm

Presented by: Jody Inglis, WSP & Colleen Myers, WSP
Area of Focus: Risk, Resilience, and Sustainability Tools
Session Level: Basic

Determination of project delivery compliance between audit cycles is a challenge for many ISO 9001-certified companies. At companies with rapid growth and high percentages of project managers, it can be difficult to accurately assess short-term project delivery compliance across the company to drive focused quality improvement. Performing "Drop-in Assessments," which are conducted as virtual meetings, provides a compliance "snap-shot" to assist with filling this gap. "Drop-in Assessments" are designed to target project managers/projects that may not be included in standard ISO audit activities due to office location or project life cycle stage. Specifically, all project managers/projects, including new or upcoming project managers, large and/or complex projects, or projects with significant margin erosion benefit from this type of assessment. This presentation will discuss project selection, assessment implementation, and key performance indicator evaluation. The "Drop-in Assessment" results are reviewed monthly to identify areas for improvement and are critical to continued project delivery and ISO 9001 compliance.

How You Can Use Reverse Mentorship to Create Future Organizational Quality Leaders
2:00 pm-2:45 pm

Presented by: Cynthia Young, CJ Young Consulting, LLC
Area of Focus: Quality's Impact on Leadership, Org Excellence, and Inclusion
Session Level: Intermediate

Do you have leaders who think the only good ideas come from senior professionals? Do you have leaders who think mentors are only those who have seniority? Does this frustrate you? Well, if it frustrates you, you don't want to miss this session. People do not have to be seniors in an organization to have formalized quality experiences as part of their leadership skills. In this session, you will come away with a different view of mentorship and how it can benefit the most important asset of an organization. – It's the people! It's the people who perform quality checks and support the quality of the products or services. It's the people who implement changes so quality must be part of the change management processes. It's the people who win business by ensuring quality as part of customer support. As part of organizational culture, reverse mentorship demonstrates inclusion, and trust, and can also support growing organizational quality leaders.

The Motivation for the Application of the Aerospace Standard AS9145 APQP and PPAP in DOD Contracting
2:00 pm-2:45 pm

Presented by: William Ireland, Ireland Consulting
Area of Focus: Supplier and Supply Chain Management
Session Level: Advanced

This paper summarizes the results of an examination related to the Department of Defense (DOD) weapons systems production approval practices in contrast to Commercial best practices. Current DOD practices have resulted in poor weapons system production outcomes that reduce fleet readiness in DOD weapons systems acquisition. By a review of reports by the Government Accountability Office (GAO), there is a basic lack of manufacturing knowledge at the production start, and this is causal to poor production outcomes. By addressing specific causality significant improvement opportunity is shown to provide new insight not found in acquisition practice. Fundamental and proven alternatives identify more disciplined best practices to improve production capability and readiness. It is now realized in the Aerospace industry that the automotive production approval process that followed industry best practices can fully address problems identified by the GAO. There has been a hesitancy in Defense Industrial Acquisition frameworks to use a more prescriptive Quality Management System (QMS), one that enables a more disciplined manufacturing development and demonstration of production capability prior to production commitment. Commercial surveys in the literature confirmed the benefits of the automotive prescriptive QMS. The more successful QMS approach can be applied to DOD acquisition practices reducing costs and improving fleet readiness.

Tuesday, May 9

Behavioral Economics: What is it? Understanding The Connection to Quality and Improvement
9:45 am-10:30 am

Presented by: Jerry Rosenthal, Rosenthal & McBride & Jessica McBride, Rosenthal & McBride
Area of Focus: Quality's Impact on Leadership, Org Excellence, and Inclusion
Session Level: Basic

There remains a prevalent bias against "people" when there is a quality event in the workplace: a failure of a product or service which impacts internal or external stakeholders, or both. Department-level leaders, more often than not, look to blame people when something does not go according to plan or procedure. Those who are more enlightened and have some experience in the domain of quality are aware that when people are not set up for success, poor processes will produce poor outputs regardless of the level of skill, knowledge, or expertise for any given activity. More recently, Behavioral Economic theories and practical ideas help to explain why some processes fail and what can be done to achieve better outcomes.

Driving AI/ML Products Success through "Culture of Quality"
9:45 am-10:30 am

Presented by: Kamala K Nanjundeshaiah, QR Konnect (Consultant/Owner)
Area of Focus: Quality's Impact on Leadership, Org Excellence, and Inclusion
Session Level: Intermediate

Technology is driving innovations and transforming all aspects of life. The advent of Artificial Intelligent (AI) and Machine Learning (ML) technologies are critical parts of driving innovations. One of the greatest benefits of AI/ML products is their ability to learn from real-world use and experience, and their capability to improve product performance. This also brings in lots of dynamics and complexity to the products. The quality systems and framework used to develop and sustain the quality of traditional products would not be sufficient for AI/ML products. In a "Culture of Quality", a paradigm shift is needed to successfully develop and maintain AI/ML products and ensure safety and efficacy throughout the total product life cycle. This session intends to discuss the following: • Why are the current quality method(s) not sufficient to ensure the AI/ML product's quality? • What is a culture of quality? • How to foster a culture of quality in an organization?

FMEA - New Ideas for Greater Effectiveness
9:45 am-10:30 am

Presented by: Denis Devos, ASQ QMD
Area of Focus: Risk, Resilience and Sustainability Tools
Session Level: Basic

In 2019, the North American automotive industry introduced a new approach to FMEA that includes four new concepts to assist organizations in better understanding the consequences of product and process failures and helps to generate new potential failure modes that would otherwise not have been considered. This presentation is essential for anyone who already understands FMEA, and wants to take their FMEA analyses to the next level.

The Next Frontier of Supplier Quality Engineering

9:45 am-10:30 am

Presented by: Kathy Lyall, Philips
Area of Focus: Supplier and Supply Chain Management
Session Level: Intermediate

What do you do when your supplier quality engineering organization has been successful and is maintaining high levels of performance from the supply base? This concurrent session is a case study that will discuss how one medical device company reimagined the supplier quality engineering role, in an effort to grow the role and increase the value the function delivered to the company. Supplier Quality Engineers were no longer solely focused on assuring individual components adhered to specifications. They were challenged to "shift to the left," getting involved in the early phases of advanced product development and leveraging "big data" to uncover opportunities to improve product and component designs. The result was SQEs ability to drive meaningful change product quality levels.

Unleash the potential: What Industry 4.0 means for the future of Quality.
9:45 am-10:30 am

Presented by: Frazier Pruitt, ASQ Rochester
Area of Focus: Emerging Professionals in Quality: A Career Primer
Session Level: Intermediate

There is a revolution coming to quality. Industry 4.0 will touch every aspect of life and industry, with no exception for the quality function. At the heart of the 4.0 revolution is data, a topic with which quality and continuous improvement practitioners are very familiar. Whether 5G, blockchain, machine learning, the cloud, or embedded sensors, the data revolution is coming. Some will be dazzled by the vast amount of data, but quality practitioners already know that data for the sake of data has no value. This presentation will overview what Industry 4.0 has for quality, share practical tips for evaluating potential 4.0 technologies, and deep dive into the potential of IoT using the 'Quality IoT Application Opportunity Model'. The real-world example of jet turbines will be used to illustrate different stages of the 4.0 evolution. To release the potential of IoT, and other quality 4.0 technologies, the focus on opportunities must shift from inside to outside the factory's confines. The opportunities are wide open when you consider what IoT can do for the customer.

Was Deming Right to Reduce Variation by Using a Single Supplier: Trade-offs in Supply Resilience and Managing Variation
9:45 am-10:30 am

Presented by: Russ Snyder, Intel & Hemal Shah, Intel
Area of Focus: Supplier and Supply Chain Management
Session Level: Advanced

With supply chain resilience a key topic in the headlines and discussions in congress with the CHIPS act to onshore semiconductors, how do we manage variation in components as companies enable multiple sources? By managing availability risk, we have opted for greater variation, and yield risk. Was Deming right to assert that we should always single source to manage variation risk? I will explore the trade-offs of multi-sourcing and managing variation risk in Intel's WiFi product line. This ultra-high volume product is a great learning ground with many examples of balancing availability risk with variation risk. The product line is uniquely suited to study variation since no two Radio Frequency (RF) components perform exactly the same.

Applying Taguchi's Methods for Designed Experiments
10:45 am-11:30 am

Presented by: Scott Sterbenz, Ford Motor Company
Area of Focus: Emerging Professionals in Quality: A Career Primer
Session Level: Advanced

Genichi Taguchi's two most prominent methods for designed experiments involve fractional orthogonal design matrices and the use of the signal-to-noise ratio for analysis of the data. Successfully applying these methods has the potential to make designed experiments extremely efficient for screening and provide exceptional insight for optimization. While Taguchi's matrices are not appropriate for all designed experiments, knowing when they are and how to leverage them will prove valuable to the problem solver. Additionally, Taguchi's methods for data analysis can be applied to any designed experiment. This presentation will start by focusing on when choosing a Taguchi matrix is appropriate. Next, the attendee will learn how to choose the most efficient Taguchi matrix, utilizing Taguchi's linear graphs. Finally, Taguchi's method for analyzing the data will be detailed, with an industry case study to illustrate the benefits.

Environmental, Social, and Governance (ESG) – The Risk of Doing Nothing
10:45 am-11:30 am

Presented by: Ernest Blanchard, SGS North America, Inc. & Adam Hammes, SGS North America, Inc.
Area of Focus: Risk, Resilience, and Sustainability Tools
Session Level: Intermediate

Recently, investors began receiving scores on the sustainability performance of publicly listed companies from ESG (environmental, social, and governance) rating agencies like DJSI, MSCI, ISS, and Sustainalytics. Now, big brands are asking their supply chains to report in platforms like CDP and Ecovadis. Even small and medium-sized private businesses are being scored on sustainability performance. The majority of these scores are publicly available with a simple internet search. Risk is everywhere: investment risk based on shareholder satisfaction, capital risk based on lender satisfaction, contractual risk based on business partner satisfaction, and revenue risk based on consumer satisfaction. The majority of ESG rating agencies score companies against their peers. So, doing nothing is a strategy for steady decline. Competition and continuous improvement are the norms for maintaining market position. A more proactive approach is necessary to improve position and stand out amongst industry peers. It has never been more important to understand the operational and financial risks related to ESG and how quality and risk professionals need to be integrated into every stage of the sustainability journey of their organizations.

Problems with Problems - how can we get better?
10:45 am-11:30 am

Presented by: Teresa Cherry, Xenix Medical
Area of Focus: Emerging Professionals in Quality: A Career Primer
Session Level: Intermediate

Based on recently published trend data on audit findings, it is evident that we have problems with our problems. This includes Corrective Actions, Preventive Actions, Nonconforming Products, and Customer Complaints. The issues identified include timeliness, effectiveness, and root cause analysis. Quality System documentation for these problems and problem-solving could be improved, resulting in fewer audit findings in these areas. This session will review the recent audit finding trend data, what basic steps to take to improve our problem-solving, root cause and investigation tools, risk analysis usage, and documentation. Real-life problems will be used as examples to highlight ways we can improve.

Qualifying Quality 4.0
10:45 am-11:30 am

Presented by: Thomas Jones, University of Central Florida & Ahmad Elshennawy, University of Central Florida
Area of Focus: Quality's Impact on Leadership, Org Excellence, and Inclusion
Session Level: Intermediate

Quality 4.0 is an important development in the digital age. Through a strategic approach to data. usage companies will achieve more responsive quality systems with greater performance than we have ever been capable of before. This session introduces the foundational elements of Quality 4.0 and how it differs from Industry 4.0 as well as legacy approaches to quality management. Quality 4.0 is a strategic approach to digital transformation with Quality as the core business focus to be achieved. By connecting data throughout the supply chain businesses can and will achieve faster improvement and better responses to constantly changing customer needs and wants. Digital transformation and big data empower businesses to provide a greater degree of customization in their offerings to their customers as well as in core business processes. No Quality 4.0 roadmap will fit every company and this session addresses the core tenants of a Quality 4.0 deployment strategy and how to develop it to suit the specific needs of a business.

Return of the Jedi Auditor: An Encore Performance of "Audit Like a Jedi Knight"
10:45 am-11:30 am

Presented by: Susan Gorveatte, Gorveatte Consulting Inc.
Area of Focus: Supplier and Supply Chain Management
Session Level: Basic

Resist the power of the dark side, and perform audits with the communication and leadership skills of a Jedi. Remain true to the purpose of the audit, look for the "good", identify the opportunities for improvement, and use your audit "Force" for the overall good of the organization. Auditing is more than just asking questions. It is about effective communication, being a strong leader, and remaining true to the purpose of the audit. Attend this session to avoid being a "Darth Vader Auditor"; the ones who use their audit "powers" for the dark side, to exert power or punish. Learn to be a Jedi Master of auditing adhering to the principles outlined in ISO 19011:2018 and using your skills to conduct collaborative interviews and build strong relationships with your auditees to ensure audits are value-added for the organization. Being a trained auditor does not always mean you will be a successful auditor. Audit skills will be presented from the point of view of a Jedi Knight using the Force complete with analogies from the Star Wars Universe created by George Lucas.

Scoring the Quality Maturity of Processes and Systems
10:45 am-11:30 am

Presented by: Richard Mallory, Mallory Management
Area of Focus: Risk, Resilience and Sustainability Tools
Session Level: Intermediate

In March of 2021, the ASQ Government Division published the ANSI G1 standard, which included a very unique means of scoring the maturity of quality practices used in systems and in processes. This workshop will present and outline the process maturity model and the system maturity model included in that standard, both of which allow objective scoring of the effective use of known quality practices within the span of control of every manager and supervisor, and organization-wide. The maturity models allow trained examiners to evaluate processes in the areas of standard process, measurements, and process improvement practices, and to rank each from level one 'Initiating' to a level five 'Excellent' score. It will also explain the methodology behind mapping a single system, and similarly assigning a quality maturity score. The use of maturity modeling is both new and innovative and has great potential beyond its current initial use in government. You are invited to come and learn a unique new skill for your quality practice

Data-Driven Engineering Design Quality for Organization Excellence

3:00 pm-3:45 pm

Presented by: Asmita Ghate, Tata Motors Limited & Kanchan Mondal, Tata Motors Limited
Area of Focus: Quality's Impact on Leadership, Org Excellence, and Inclusion
Session Level: Intermediate

Engineering Design Quality plays a pivotal role in the overall quality value chain of an organization. To achieve excellence, it is imperative for the design quality fraternity to move from a checker to an enabler role and further travel towards a trusted advisor role. Quality professionals need to reskill themselves beyond classical quality tools and nurture understanding and usage of digital systems for achieving best-in-class quality. Digital toolsets in the engineering design ecosystem from pre-project kick-off until engineering approval for the production phase, generate various data sets. A comprehensive digital technology landscape, coexisting with Product Lifecycle Management towards establishing a single source of truth ensures robust engineering quality. Learning Re-use for the next program creates the differentiating value proposition. Lead indicators for robust design quality rely on avoiding defects at the ideation phase through knowledge-based design processes. Defect identification and rectification through design review and prototype testing have limitations being lag indicators. Process Standardization through knowledge-based culture creates exceptional results leading to integrated systems towards robust design and organizational excellence.

Lean Thinking - an Engaging Simulation
3:00 pm-3:45 pm

Presented by: Patrice Griffith, UT Southwestern Medical Center
Area of Focus: Emerging Professionals in Quality: A Career Primer
Session Level: Intermediate

This session will prepare organizational trainers of a lean curriculum a way to incorporate a highly interactive day-long simulation into a presentation of basic lean concepts and tools I call "Lean Thinking". The simulation requires a minimum of resources to demonstrate concepts that are explained during the didactic portion of the class. Participants in the "Lean Thinking" class will come away with the ability to apply the learned concepts and tools in their daily work.

Lean Six Sigma and TeamSTEPPS: A Comparison of Frameworks, Principles, and Behaviors
3:00 pm-3:45 pm

Presented by: Katie Benyo, Accumen, Inc.
Area of Focus: Emerging Professionals in Quality: A Career Primer
Session Level: Basic

TeamSTEPPS stands for "Team Strategies and Tools to Enhance Performance and Patient Safety." It is an evidence-based set of teamwork tools, aimed at optimizing patient outcomes by improving communication and teamwork skills among healthcare professionals. It was developed by the Agency for Healthcare Research and Quality (AHRQ) in 2003 when AHRQ and the Department of Defense (DoD) convened a national panel on human factors, human error, and medical team training. Approximately 30 of the nation's leading experts discussed the needs, requirements, and strategies for effective teamwork in healthcare, including what healthcare could learn from aviation and other disciplines. The result was a roadmap that helped guide the research that followed. Lean Six Sigma practitioners who review TeamSTEPPS' three-phased process and its tools, aimed at creating and sustaining a culture of safety, will see several familiar concepts. Key principles like team structure, communication, leadership... tools like huddles... sound familiar? What do the two systems have in common, and what can lean Six Sigma practitioners learn from TeamSTEPPS? This session will compare and contrast the frameworks, principles, and behaviors of TeamSTEPPS vs. lean Six Sigma. The presenter is both an ASQ-Certified Six Sigma Black Belt and an AHRQ-certified TeamSTEPPS Master Trainer.

Maximizing risk outcomes: Taking a play from the Cyber and PESTLE playbooks to more strongly align risk and strategic planning

3:00 pm-3:45 pm

Presented by: Rhonda Farrell, ASQ Innovation TC
Area of Focus: Risk, Resilience, and Sustainability Tools
Session Level: Intermediate

Risk management and analysis like quality, innovation, and change require a holistic view to be taken of the organization and its complex, often global operating environment. We examine the maximization of risk outcomes through the triad of resiliency, sustainability, and environmental, social, and governance (ESG) goals, and discuss how harnessing the best of Cyber and PESTLE playbooks enables us to overcome the weakest links within supply chains, culture, processes and procedures, and across our workforce writ large. Additionally, we take a deep look at how digital transformation and data modernization enable a more balanced quantitative

and qualitative approach to be considered within the context of a risk-oriented quality management system in order to better identify, measure, mitigate, and control for the myriad of risks that can, and often do, arise. Lastly, we show that harnessing seemingly disparate risk sources allows us to harness lateral innovative thinking to approach risk problems using heightened creative problem-solving skills which then maximize our strategic planning and risk-related outcomes.

Real Insights to Improve Supplier Quality: Supply Chain can be a Powerful Differentiator
3:00 pm-3:45 pm

Presented by: David Isaacson, ETQ
Area of Focus: Supplier and Supply Chain Management
Session Level: Basic

The value of your supply chain has never been higher. On average, the value suppliers provide in products has risen significantly over the past 20 years. In fact, some estimates show this has grown from 50% of the value to over 80%. Manufacturers are facing new levels of supply chain risk: new suppliers, uncertain supplier quality, transportation delays, cyberattacks, raw material shortages, tougher environmental regulations, and even global economic uncertainty. Ensuring supplier quality is more important now than ever, and you need to develop a plan for integrating quality management throughout your supply chain. In this session, you'll learn how leading organizations take advantage of a quality management system, contributing to their quality processes by:

- Vetting new and existing suppliers
- Tracking quality of current suppliers
- Boosting supply chain visibility
- Maximizing rich supplier data
- Reducing poor supplier quality costs
- Reacting to rapidly changing market conditions

Unleash the Power of Strategic Data Visualization for Process Improvement

3:00 pm-3:45 pm

Presented by: Shruti Patil, City of Tyler
Area of Focus: Quality's Impact on Leadership, Org Excellence, and Inclusion
Session Level: Intermediate

We have all seen the buzz on data visualization to some extent. For some, it is overwhelming and for others, it is a new norm. As communicators, we often face the challenge of how to craft our story to make an impact on our audience. As decision-makers, it is a challenge to prove the basis of our decisions to others. This session demonstrates the effectiveness of a guided approach in sustaining empowering process improvement solutions and fostering a culture of collaboration throughout the organization. You will recognize the impact and depth of capabilities afforded by strategic data visualization in the realm of Lean Six Sigma to help pull a captivating story out of a big set of data. Hopefully, what you learn here will inspire you to do the same with your own data!

Auditing Innovation Management; The Creation of ISO 56001

4:00 pm-4:45 pm

Presented by: Peter Merrill, Quest Management Inc.
Area of Focus: Quality's Impact on Leadership, Org Excellence, and Inclusion
Session Level: Intermediate

ISO 56001 will be an internationally accepted auditable innovation management system standard and is due to be published at the turn of the year 2023. The presenter of this session is the international project lead for this new standard. The demand for this standard comes from organizations that want to drive rigor in their IMS, financing organizations that want assurance they are providing finance to an organization with an effective Innovation Management System, and innovative organizations seeking to partner with other innovators. Research has shown that 95% of innovators partner. ISO 56001 both in structure and in text uses the Harmonized Structure for ISO Management System Standards and so will integrate with ISO 9001. An effective QMS is the platform for an effective IMS. Companies that are serial innovators have a system approach to innovation and continuously generate new ideas. The version of ISO 17021 for Innovation which will provide principles and requirements for the competence, consistency, and impartiality of Certification Bodies will be introduced The session will provide a summary of

the key clauses, and show key audit points and the nature of the objective evidence. They will be provided guidance on how to meet key requirements.

Improving Operational Risk Management in a Fortune 200 Company

4:00 pm-4:45 pm

Presented by: Jonathan Martin, Lincoln Financial Group & Michael Nichols, Lincoln Financial Group
Area of Focus: Risk, Resilience, and Sustainability Tools
Session Level: Intermediate

How do you improve operational risk management in a Fortune 200 company with over 10,000 employees across the country? Driving change can be difficult, especially when there are many stakeholders, competing priorities, and tight budgets. Learn about one team's journey from formation to the normalization of new processes and new partnerships including a key partnership with the Enterprise Continuous Improvement/CI Academy team. Join us to learn more about what worked and what did not on our journey to improve operational risk management by reinforcing that everyone is a risk manager.

Restoring The Triple P Model Through Quality
4:00 pm-4:45 pm

Presented by: Willy Vandenbrande, Thought Provoking Quality
Area of Focus: Risk, Resilience, and Sustainability Tools
Session Level: Intermediate

In 2018 John Elkington recalled his famous triple P model, for the same reason as car manufacturers recall cars: because they malfunction. He was disappointed with the result and saw how in the end it became a kind of giant greenwashing, where profit was maximized and Planet got lip service. In this presentation, we will show through the data from the UN Sustainable Development Goals (UN SDG) reporting, that Elkington had and has a point. But confirming that the situation is not good, does not make it better. The focus will therefore be on what quality can contribute to turning this around and restoring the balance and as such the triple P thinking itself. When we think about improving, we know the value of our quality knowledge and we arewell-placedd within the organization to apply this to sustainability. Examples will be given of what quality professionals can do within their organization but also within society at large. This includes knowledge, open communication, and a commitment to action. In addition, we will show how quality organizations can contribute to an improvement of the Planet P results.

The 7 Basic Quality Tools - A Fresh Perspective

4:00 pm-4:45 pm

Presented by: Peg Pennington, MoreSteam
Area of Focus: Emerging Professionals in Quality: A Career Primer
Session Level: Basic

In the 1950s, Edward Deming emphasized the basic tools needed for quality improvement. Inspired by Deming's lectures in Japan, Kauru Ishikawa further defined Deming's basic tools into seven specific ones. As a result, Ishikawa's Seven Tools of Quality have set the standard for quality and problem-solving for decades. But are these still the right tools? The world is rapidly changing; are they sufficient to address today's challenges? What is missing that we need to reconsider for today's problems? How should quality practitioners lead transformations to adapt to these changes? Join a discussion reviewing how rapidly changing environments and technologies present problems that traditional methods may or may not have addressed. Identify what other assets need to be marshaled and brought to bear on problems of all sizes. And consider how the human element and organizational leadership contribute to the formula for success.

The Seven Risks of Medical Devices

4:00 pm-4:45 pm

Presented by: Russell Roberson, Northwestern University
Area of Focus: Risk, Resilience, and Sustainability Tools
Session Level: Advanced

This presentation will cover seven areas of medical device risk: 1) compliance risk, 2) product performance risk, 3) regulatory risk, 4) medical professional (and other users) risk, 5) patient safety risk, 6) patient experience risk, and 7) reputational risk. The patient experience risk is a new concept relative to medical device risk. Each medical device risk will be reviewed using a risk staircase and risk cycle process; both new to the area of medical device risk management. The risk cycle includes the steps of :

- Visualization and observation
- Understanding,
- Confirmation
- Acting

These steps are critical to assessing medical devices against the totality of risk. Also, to be addressed will be whether the Risk Management Process has a place with non-registered medical devices as opposed to formally registered medical devices. The presenter has a unique view on medical device risk having had two significant cancers in his life. Those same medical devices that he helped develop over his career were used on him during his cancer treatments.

Using the 3-Chart Method for SPC

4:00 pm-4:45 pm

Presented by: Jenny Hellrung, 3M
Area of Focus: Emerging Professionals in Quality: A Career Primer
Session Level: Intermediate

Statistical process control is one of the many tools of the quality profession. Choosing the appropriate control chart is a key skill for quality engineers. While either I/MR or XBar/R charts can be used in most variable data situations, there are some cases where a better choice is to use a combination of these called the 3-chart method. This presentation will show how to apply this method and describe situations where this method would be appropriate.

Wednesday, May 10

Beyond Data Verification – Quality in the Age of Business Intelligence

8:30 am-9:15 am

Presented by: Devyani Cox, The Goal Inc
Area of Focus: Emerging Professionals in Quality: A Career Primer
Session Level: Intermediate

Due to the growing transformation of digital data and improvements in business intelligence, it is commonplace to receive low-quality data that is erroneous or misrepresented. Flawed data can cause misinformation and unsound direction to management. All data, whether digital or not, is susceptible to misapplication. In addition, organizations might have incentives to structure data in such a way that favors their desired outcome.

Calibration and Traceability - Myths and Misnomers

8:30 am-9:15 am

Presented by: Heather Wade, Heather Wade Group, LLC
Area of Focus: Risk, Resilience, and Sustainability Tools
Session Level: Basic

"NIST-Traceability", adjustment is the same as calibration, a calibration is good forever, "ISO 17025-certification", there is one appropriate calibration method for any type of measuring equipment. These are all just some of the myths and misnomers related to calibration and traceability. Language and understanding and use of correct terminology ease communication and can reduce mistakes and misunderstandings. Ultimately, using correct words and terms reduces risk. This is of value to those in manufacturing, testing, and calibrations laboratories, auditors, customers, and consumers. Measurement (metrological) traceability with regard to calibration is often misunderstood. The belief is that any calibration is acceptable and is valid forever. Ensuring measurement traceability is an ongoing practice and is critical to valid, repeatable, and defendable measurement data. Measurement traceability ranges from measurement equipment calibration, quality control, sample tracking, and test data reporting. What should be included in recording data to ensure measurement traceability? How can measurement traceability be ensured? To begin, measurements must be recorded. If they are not recorded with adequate detail, then one must assume that the measurement did not happen as there is no evidence to defend that it did happen.

Do This This Way

8:30 am-9:15 am

Presented by: Larry Edwards, Larry Edwards & Associates, LLC.
Area of Focus: Emerging Professionals in Quality: A Career Primer
Session Level: Intermediate

As we develop in our careers and in our lives, our feedback chambers become of increasing importance in knowing "what to do", "when to do it" and "whom to do things with". Over the past few years, the value of relationships has become increasingly important and in view both personally and professionally. The benefits of having a coach and/or mentor are becoming increasingly clear and quantifiable. Research shows 91% of employees with a mentor were happy with their jobs, and over 57% were "very satisfied" (CNBC Happiness Survey). Coaching has shown benefits in new or improved skills - 50%, increased motivation - 43%, and obtained goals - 20%. Experiencing these benefits and so many more the obvious question is, "Why aren't we doing more of this?". While coaching and mentoring programs have been on the rise since 2020, it is important to know which tool to apply for which outcomes. In this presentation, we will explore the differences, similarities, benefits, and challenges of coaching and mentoring.

Driving Healthcare Operational Excellence through a Robust Academic Training Program

8:30 am-9:15 am

Presented by: Dennis Delisle, OSUWMC & Shane Flickinger, Jefferson Health
Area of Focus: Quality's Impact on Leadership, Org Excellence, and Inclusion
Session Level: Intermediate

All organizations and teams focus on improving processes and outcomes. The competitive differentiator is in the rate of improvement. To that end, operational excellence can serve as the foundation and catalyst to drive change. This session focuses on the evolution of a comprehensive academic program from the ground up as well as the impact leaders have made as a result. Operational Excellence is the academic and professional field focused on developing and implementing evidence-based performance improvement methodologies needed to promote value and efficiency. Operational Excellence professionals lead transformation by focusing on eliminating waste and improving system performance. This healthcare-focused program aims to improve the effectiveness and efficiency of individuals, teams, and organizations throughout the industry, leveraging lessons learned and best practices within and out-of-industry.

Healthcare Data Analytics - Finding, Crunching, and Displaying Data for Zero Harm

8:30 am-9:15 am

Presented by: Jay Arthur, Knowware International Inc.
Area of Focus: Quality's Impact on Leadership, Org Excellence, and Inclusion
Session Level: Intermediate

Every hospital has underlying conditions that cause sluggish, error-prone patient care. A small rural hospital is different from a big city hospital. They are all "sick" in their own way. There is no broad-spectrum antibiotic that will fix healthcare. Every healthcare facility can use data analytics to pinpoint specific problems for solutions. Rather than using summarized data, successful improvement depends on using "raw data," Excel PivotTables, control charts, Pareto charts, histograms, and fishbones to focus the improvement effort.

Organisational Excellence: Using the Kano Model to Determine the Real Needs of Customers

8:30 am-9:15 am

Presented by: Enefola Odiba, International Lean Sigma Institute
Area of Focus: Quality's Impact on Leadership, Org Excellence, and Inclusion
Session Level: Advanced

The pursuit of achieving organisational excellence can strengthen the overall reputation of an organisation both internally and externally. Organisational excellence requires the organisation to plan, implement, and improve processes to deliver value to customers. Customer voices evolve quickly, it, therefore, becomes a critical necessity for organisations to understand customers' true needs and prioritise them. It is essential also for leaders of the organisation to embrace ideas, skills, tools, and techniques to deliver products and services that meet or exceed business expectations – value to customers. This interactive session provides a step-by-step roadmap for applying the Kano model to understand the needs of customers and identify what is critical to them. Topics to be discussed include the identification of customers, customer information gathering, analysing customer information to understand the needs of the customer. The Kano model classifies customer requirements into three categories: basic, expected, and excitement. In addition, a university project I led, tagged 'Transforming the Experience of Students Through Assessment (TESTA)' (case study) will be presented to illustrate the application and the usefulness of the Kano model. The university secures a top seven ranking for the fifth consecutive year in Complete University Guide 2023, and the best in the region after the transformation project.

Data Science and Lean Six Sigma Synergy

9:30 am-10:15 am

Presented by: Michael Mladjenovic, Simplicity Advantage
Area of Focus: Emerging Professionals in Quality: A Career Primer
Session Level: Intermediate

Building a bridge that will close the gap between traditional lean Six Sigma methodology and Data Science is one of the most practical and pragmatic approaches. This approach accelerates the adoption process while allowing organizations to build Quality 4.0 data analytics competence regardless of size quickly. In addition, combining Data Science and lean Six methodologies enables organizations to realize immediate benefits with a low-cost investment and stay competitive During this presentation, you will:

- Learn how to integrate DMAIC and CRISP-DM methodology
- Understand: classification, clustering, and deep learning
- Grasp the importance of the Analytics Maturity Model
- Discover how to develop lean Six Sigma and Industry 4.0 Synergy roadmap

At the end of the presentation, we will present the easy-to-use no-code Excel add-on tool that enables organization-wide rapid data mining deployment.

Identifying Customer Unmet Needs using Jobs to be Done and Quality 4.0 Tools

9:30 am-10:15 am

Presented by: Ronald Kelley, Green Gap Solutions LLC
Area of Focus: Quality's Impact on Leadership, Org Excellence, and Inclusion
Session Level: Intermediate

70 percent of change programs fail to achieve their goals (according to McKinsey). Jobs-to-be-Done (JTBD) and Outcome-Driven Innovation (ODI) is a strategy and innovation process that is built around the theory that people buy products and services to get jobs done. JTBD and ODI have roots in Lean and Six Sigma. As people complete these jobs, they have certain measurable outcomes that they are attempting to achieve. It links a company's value-creation activities to customer-defined metrics. Previous innovation practices fail 80% ineffective because they were incomplete, overlapping, or unnecessary. ODI attempts to identify jobs and outcomes that are either important but poorly served or unimportant but over-served. ODI focuses on customer-desired outcomes rather than a demographic profile in order to segment markets and offer well-targeted products, services, and processes. By knowing how customers measure value, companies are able to align the actions of marketing, development, and R&D with these metrics and systematically create customer value.

Key Skills for Acceptance Sampling

9:30 am-10:15 am

Presented by: Karen Hulting, Medtronic
Area of Focus: Emerging Professionals in Quality: A Career Primer
Session Level: Intermediate

Acceptance Sampling is an essential skill for quality professionals to respond to product & process risks and support excellence in product development and manufacturing. Participants will gain an understanding of the terminology, common misconceptions, and appropriate uses of acceptance sampling. They will also receive step-by-step instructions for using software tools such as Minitab and JMP to evaluate the protection of a sampling plan and learn about ISO standards for acceptance sampling. Recommendations for building sampling plans with strong statistical rationale will be shared in order to provide a strong foundation for quality performance.

Predictive Resilience Modeling

9:30 am-10:15 am

Presented by: Lance Fiondella, University of Massachusetts
Area of Focus: Risk, Resilience, and Sustainability Tools
Session Level: Basic

Resilience is the ability of a system to respond, absorb, adapt, and recover from a disruptive event. Dozens of metrics to quantify resilience have been proposed in the literature. However, fewer studies have proposed models to predict these metrics or the time at which a system will be restored to its nominal performance level after experiencing degradation. This talk presents alternative approaches to model and predicts performance and resilience metrics with elementary techniques from reliability engineering and statistics. We will also present a free and open-source tool developed to apply the models without requiring a detailed understanding of the underlying mathematics, enabling users to focus on resilience assessments in their day-to-day work.

Qualifying Suppliers in the "Now Normal" Environment

9:30 am-10:15 am

Presented by: Pamela Carvell, Pfizer Inc.
Area of Focus: Supplier and Supply Chain Management
Session Level: Basic

In this post-pandemic era (Now Normal), finding and qualifying suppliers can be a challenge. This presentation is meant to provide some insights and ideas on how and where to look for suppliers. While reviewing these ideas, we will be able to further discuss ways to qualify suppliers in this virtual world. Global supply challenges and reduced resources (people and costs) present new opportunities in supplier management. I will share some possibilities and will welcome ideas on real-world issues and potential next steps.

Unlocking More ISO 9001 Secrets: Risk Based Thinking

9:30 am-10:15 am

Presented by: Don Brecken, Quality Consulting Services, LLC
Area of Focus: Risk, Resilience, and Sustainability Tools
Session Level: Intermediate

Don Brecken, ASQ Fellow, Exemplar Global Certified Master Auditor, and Skill Examiner shares his expertise on the effective implementation of ISO 9001:2015-based quality management systems. This never before shared information will focus on new ways organizations may integrate and leverage risk-based thinking in their management systems. This expert-led session may challenge even the most seasoned quality professional to think about ISO 9001:2015-based quality management systems differently. The ISO 9001:2015 standard, written in the Queen's English and published over seven years ago, still contains a few revelations. The standard requires organizational top management to demonstrate leadership and commitment with respect to the quality management system by promoting the use of risk-based thinking. Risk-based thinking establishes a basis for increasing the effectiveness of the quality management system, achieving improved results, and preventing negative effects. Attendees will learn unique and innovative ways to apply risk-based thinking to better leverage their quality management system to help them run their business. Your presenter, with over 28 years of experience establishing, implementing, maintaining, auditing, and continually improving quality management systems, will provide attendees with access to his insanity!

END OF CONCURRENT SESSIONS - WORKSHOPS LISTED ON THE FOLLOWING PAGES

WORKSHOPS

Monday, May 8

IMPACTFUL LEADERSHIP FOR QUALITY - Establishing & Promoting a Quality Culture that Sustains a Strong Quality Foundation

9:45a m-11:45 am

Presented by: John Blankensop, AVIAN
Area of Focus: Quality's Impact on Leadership, Org Excellence, and Inclusion
Session Level: Basic

This workshop will provide an overview of foundational leadership and quality management principles and practices for promoting a quality culture that achieves quality objectives and delivers value through fulfilling the needs and expectations of the organization. Key topic areas discussed include:

- Foundational Quality Management Paradigms
- Principles & Practices
- Creating & Promoting a Quality Culture
- Quality Culture Aspiration
- The Five Key Foundational Quality Culture Attributes
- The Way Forward

This workshop will be highly interactive and will include practical tools for assessing current state quality culture maturity levels and determining necessary actions for improving quality culture maturity levels that strengthen and sustains an organization's quality foundation resulting in performance outcomes that achieve sustained success.

Top Facilitation Tips for Non-Facilitators

9:45 am-11:45 am

**Schedule as of March 30, 2023
Subject to change.**

Learn more and register at
https://asq.org/conferences/wcqi/registration

Presented by: Marilyn Monda, Monda Consulting LLC & Carolann Wolfgang, NAVFAC
Area of Focus: Emerging Professionals in Quality: A Career Primer
Session Level: Basic

Will you be ready to facilitate when there is an important project, decision, or issue to resolve with a team? This workshop will prepare you with key strategies and tools. Attendees will: (

- Learn about how to prepare, design and implement a productive team meeting
- How to use a variety of simple tools to surface ideas and influence team performance outcomes
- How to recognize and manage team conflict and other interpersonal dynamic pitfalls.

Workplace meetings aren't getting easier. We are called to solve more complex problems, network relentlessly, and use creative advantage. When well facilitated, a meeting is one of the best ways to effectively achieve sustainable tactical, creative, or strategic outcomes. Learning team facilitation management strategies will improve your own professional development, make you a more confident and effective facilitator, and increase your team's options for innovation and expanded thinking for complex issues. It is a key skill for the quality Leader of the future.

Quality Leadership Competencies: Taking it to the street through field experience

1:00 pm-3:00 pm

Presented by: Stephanie Gaulding, Pharmatech Associates, Inc. & Marilyn Monda, Monda Consulting
Area of Focus: Emerging Professionals in Quality: A Career Primer
Session Level: Intermediate

Are you struggling to figure out how to build leadership competencies to take on that next role? Many quality professionals struggle to transition from individual contributor roles into leadership roles in their organizations. We spend years focused on learning quality tools and principles and applying them in our work, but when it comes to figuring out how to become a leader or develop the leadership potential in others, we can struggle to figure it out. This workshop teaches you strategies to identify ways to practice that will help your leadership development move forward in a productive manner. During this interactive workshop, attendees will learn about different types of practice opportunities, where to find them, how to practice different levels of experience (basic, intermediate, and advanced), and finally, how to leverage feedback as a tool for reflection on the success of the practice. Become a leader who strives to continually improve. Have some fun and get a jump start on learning how to progress your leadership development to go where you want to go. Come to this workshop and consider your leadership skills in a way you may never have done before!

Starter Kata: Building a Continuous Improvement Culture in 20 Minutes a Day

1:00 pm-3:00 pm

Presented by: Leigh Ann Schildmeier, Park Avenue Solutions
Area of Focus: Quality's Impact on Leadership, Org Excellence, and Inclusion
Session Level: Basic

In the current climate of global instability and economic uncertainty, any organization with a workforce primed for rapid, proactive problem-solving has a leg up. But how do you get an entire team to speak the same language about identifying obstacles and working through challenges when there are so many different tools and methodologies out there? You emulate the foundational mindset of one of the most successful manufacturing companies in history and implement Toyota Kata. Instead of training in another tool or system with specific applications, Toyota Kata teaches a simple method for creating a shared way of thinking and doing that can be applied to any type of challenge. Kata isn't about preaching and teaching "the Toyota solution" to various problems. Rather, it provides a framework for building an effective, sustainable continuous improvement culture that can be learned and implemented quickly in any type of organization in any industry. This workshop will teach participants the powerful Kata behavior routines through demonstration, observation, and a fun, hands-on learning experience that will give participants a jumpstart on a new skill to take back with them and implement right away.

Building Trust, Communication, and Respect at Work: Enhance Your Multi-Generational Culture

9:45 am-11:45 am

Presented by: Zac Jarrard, Jarrard Consulting, LLC & Douglas Wood, DC Wood Consulting LLC
Area of Focus: Quality's Impact on Leadership, Org Excellence, and Inclusion
Session Level: Basic

Contemporary organizations are often made up of multi-generational teams who need to work together to achieve shared goals. Generations can vary based on their background and age, ranging from early career to late career. This applies to a wide range of organizations including manufacturing, service, defense/military, education/training, government, healthcare, not-for-profit agencies, and much more! Sometimes, different generations do not get along or understand each other. This can harm organizational culture, recruitment, and retention, and decrease team performance. However, by understanding the different generations in the workplace, organizations can build a positive work culture that is inclusive of all generations. They can also tap into generational strengths to create new opportunities for collaboration, innovation, and new ideas. Organizations that can tap into generational strengths will also help foster leadership, organizational excellence, and diversity, and build a foundation for future success into the rest of the twenty-first century. This workshop will examine the Silent Generation to Generation Alpha, provide tools for leading and engaging multi-generational teams, and examine emerging trends that will affect the global marketplace. Participants will engage in hands-on activities to learn more about their generation and apply quality tools in teams to develop strategies for building a thriving multi-generational culture.

Innovation Management and its Roots in Quality

9:45 am-11:45 am

Presented by: Jane Keathley, Keathley and Co, LLC & Peter Merrill, Quest Management Inc
Area of Focus: Quality's Impact on Leadership, Org Excellence, and Inclusion
Session Level: Intermediate

For reasons we're all too familiar with – the rapid pace of change, greater needs and challenges of increasing populations, advancing technologies, etc. – our organizations are constantly identifying ways to reinvent themselves for higher levels of performance. Successful reinvention requires innovation. This workshop will provide descriptions of the key elements of an Innovation Management System, with emphasis on the connectedness of the IMS to Quality. 'Part 1 - Leading the Innovative Organization' will cover Innovation Leadership, Strategy, and Culture. 'Part 2 - Obtaining Innovation Results will cover Innovation Structure, Process, and Metrics. Various tools will be introduced in each part, with hands-on exercises related to innovation.

Answering the Call: ESG's Demand for a Quality Workforce Excellence Roundtable – Powered by ASQE

1:15 pm-2:45 pm

Presented by: Matthew Meuleners, FOCUS Training

Join ASQE as we offer all WCQI attendees the rare opportunity to experience one of our signature thought-leadership events – the Excellence Roundtable (ERT). Presented as a panel forum, with facilitated breakout discussions for participants, this year's ERT topic is "Answering the Call: ESG's Demand for a Quality Workforce", and features the newest Insights on Excellence® (IoE) research Category of Environmental, Social, and Governance (ESG) practices. ESG focuses on how to conduct business within a complex, interdependent world for long-term success to improve organizational performance and corporate responsibility. The ERT delivers knowledge sharing and emerging trends from subject matter experts, with networking on key takeaways and exploring how to leverage existing workforces to drive current and future-state ESG initiatives. Engage in this discussion of aligning quality and sustainable development principles, connect with fellow quality professionals and executives, and learn how your organization can benefit from IoE resources from ASQE. For more information about IoE, visit insightsonexcellence.org.

END OF WORKSHOPS

AFTER 5 SESSIONS LISTED ON THE FOLLOWING PAGES

After 5 Sessions

Monday, May 8th

Affinity-Clock-Sequence for Work and Fun

5:00 pm-6:00 pm

Presented by: Tracy Owens, ASQ & Therese Steiner, ASQ East North Central Region
Area of Focus: Quality's Impact on Leadership, Org Excellence, and Inclusion
Session Level: Intermediate

In their 2020 book F-Notes: Facilitation for Quality, Tracy Owens and Therese Steiner featured many quality tools that can be used in non-traditional settings. Several of these tools can even be used outside the workplace to organize a person's or family's activities. One such set of tools is the progression from Affinity Diagram to Clock Diagram and the resulting Sequence (pp. 70-80 in F-Notes). This After-5 workshop will give participants a chance to practice the Affinity-Clock-Sequence deployment on a variety of topics, some work-related, some more personal/family-oriented, and some just plain fun.

A Quality Specialist Goes to Poka-Yoke Park

5:00 pm-6:00 pm

Presented by: Tameson Yip, Mayo Clinic Arizona & Barbara Harris, Mayo
Area of Focus: Emerging Professionals in Quality: A Career Primer
Session Level: Basic

Planning a family vacation to a theme park can be a challenge. Muda (wastefulness) is everywhere, from transporting the family to and from the park (e.g. getting lost, not finding a parking space), to time spent waiting in line, energy spent crisscrossing the park repeatedly, having insufficient event passes for all members of the family, and heat stroke. Applying lean principles to the planning stages will help avoid that waste and optimize happiness for the whole family. In this session, we will go over the five principles of lean (value, value stream, flow, pull, and continuous improvement) as applied to an expensive but fun vacation to a large amusement park. While we can't control the park layout, costs, weather, and other important variables, this session will help us realize the impact a good plan can have on our overall enjoyment. Basic principles will be outlined, but lean experts will enjoy the challenge presented as together, we create the perfect trip. So, find your family and let the fun begin

More Impact, Less Stress - Developing Resilience in the Never Normal

5: 00 pm-6:00 pm

Presented by: Erin Urban, UPPSolutions LLC
Area of Focus: Risk, Resilience, and Sustainability Tools
Session Level: Basic

THE WHAT: Discover the critical tools to help you and your teams reduce stress, increase creativity, and avoid burnout. Learn how to leverage easily applicable science-based solutions to mindfully manage change while increasing your resilience in an evolving workplace. Reveal the key links between neuroscience-based solutions to achieving calm, clarity, and confidence in the face of constant (and sometimes unwelcome) change. THE WHY: As we attempt to reconcile the events of the past two years, it is becoming obvious that our world will never be the same. Many people report feeling "changed" and find the level of continued uncertainty a significant source of stress. It is likely that you are doing everything possible to manage change and push through, yet, you cannot pour from an empty cup. Chances are, doing what has always been done won't achieve the clarity you desire. Different tools and methods are needed now, more than ever, to address the current state of compounding change. It is no longer enough to say that we just must "push through". It's critical to understand how to develop resilience to thrive and show up 100% every day during uncertain and challenging times.

Schedule as of March 30, 2023
Subject to change.

ASQ

Learn more and register at
https://asq.org/conferences/
wcqi/registration

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