

Quality and Improvement

Monday, May 13th

Concurrent Sessions

Crafting a Culture for Quality 4.0 Leadership

9:45am-10:30am

Presented by: Thomas Jones & Ahmad Elshennawy, University of Central Florida

Transforming Leadership

Session Level: Intermediate

Quality 4.0 continues to be a relevant topic for many quality practitioners. As we continue to explore different ways to apply technology and utilize data to achieve our quality goals an often overlooked aspect of Quality 4.0 success is the human element of the workforce. This talk explores not just the technology skills required for a workforce to adapt with a digital transformation, but the foundational elements of a Quality 4.0 culture. Maximizing the value from a Quality 4.0 system goes far beyond actions taken by quality practitioners, management, and IT professionals. In order to realize as much of the potential as possible from a Quality 4.0 system quality leaders must instill cultural principles that will leverage the entire workforce. Blending elements of Total Quality with Lean Culture while navigating the change management aspects of implementing a technology package will require soft skills and clear goals for what the desired culture looks like at the outset of a transformation. This presentation details the foundational elements of the culture that needs to be built for Quality 4.0 success in a way that provides a tangible path forward for culture development during a digital transformation.

Change Management Trends, Integration, and Alignment with Quality and Excellence

9:45am-10:30am

Presented by: Nancy Nouaimeh, XcelliUm Consulting

Area of Focus: Transforming Leadership

Session Level: Intermediate

Effectively managing change requires a new mindset and a positive influence. Leaders must create an environment where individuals feel comfortable with the new, provide support and resources, encourage employees' participation, and celebrate successes along the way. A well-managed change process leads to greater organizational agility, increased productivity, and improved employee morale. Embracing change is essential for organizations to stay competitive and thrive in an ever-evolving marketplace. With the right mindset and approach, change management can become a positive experience for everyone involved. This presentation will showcase why and how change management integration within other disciplines such as Quality and Excellence, will support the execution of effective change management plans in an efficient way, ultimately enhancing the success of change initiatives. It will also address Change Management from a Quality perspective. For Quality Leaders developing change management skills is not just a professional enhancement; it's a strategic imperative. Quality leaders' ability to navigate and lead change will help position them as vital catalysts for the success of their organizations. Divided into three integral parts, the presentation will explore the multifaceted world of change management from a Quality and Excellence Perspectives. It begins with a dive into the trends that are currently shaping the field. Subsequently, we explore the integration of change management with the Shingo Model, a renowned framework for operational excellence. Finally, in the third part, we discuss the alignment required between Change Managers and Quality Managers to ensure the successful implementation of change initiatives and the change management skills needed for Quality Managers.

Unlocking Healthier Hospitals: Pioneering Nosocomial Infection Mitigation through Predictive Models

9:45am-10:30am

Presented by: Amitabh Saxena, Anexas

Area of Focus: Tools and Beacons

Session Level: Intermediate

Key Highlights: Discover the convergence of data science and healthcare expertise through unveiling of a pioneering work in reducing hospital-acquired infections. Learn how predictive models can effectively forecast the likelihood of nosocomial infections. **What to Expect:** **In-Depth Analysis:** Explore the multifaceted factors influencing hospital-acquired infections, ranging from patient age and health condition to environmental variables such as UV filters and handwashing techniques. **Data-Driven Insights:** Gain insights into the development of regression models meticulously crafted to predict the occurrence of infections. Uncover how patient/nurse ratios, staff training, visitor screening, and other parameters contribute to these models. **Operational Excellence:** Learn how the integration of Lean and Six Sigma methodologies enhances infection prevention strategies, optimizing resource allocation and process refinement. **Case Studies:** Immerse yourself in real-world case studies that spotlight the successful implementation of predictive models, resulting in tangible reductions in hospital-acquired infections. **Future Prospects:** Explore the potential of these predictive models to revolutionize infection control measures, offering a roadmap to safer and more resilient healthcare environments. This presentation is a testament to the power of interdisciplinary collaboration, where data-driven insights intersect with healthcare acumen to create lasting positive change. Attendees will leave with actionable knowledge that can be applied in their respective healthcare settings, amplifying patient safety and bolstering the overall quality of care.

Improving Effluent Quality before Discharge with Six Sigma Methods

9:45am-10:30am

Presented by: Martha Ramírez-Valdivia & Patricia Rebolledo, Universidad de La Frontera

Area of Focus: Shaping Processes

Session Level: Intermediate

Sanitation service companies situated in Chile hold the responsibility of ensuring the uninterrupted provision and quality of drinking water, along with the proper collection, treatment, and disposal of wastewater. However, in the latter aspect, it has come to light that certain factors could lead to variations in crucial parameters. This, in turn, can result in a failure to meet the stipulated regulations governing the discharge of treated wastewater into continental water bodies, such as rivers. This issue pertains to the wastewater treatment process managed by the Operations Management division of these companies. This study introduces a proposal aimed at regulating the critical parameters of the Wastewater Treatment process within a regional company. The primary objective was to elevate the quality of the discharged effluent into the surrounding bodies of water. This proposed strategy draws inspiration from the Six Sigma methodology. The critical components of wastewater treatment within the purification process were successfully identified. An in-depth analysis of the vital parameter known as biological oxygen demand was conducted across three sites employing the aerated lagoon treatment method. Upon analysis, the principal underlying cause was revealed to be the lack of systematically scheduled preventive maintenance for the pre-treatment equipment within the plants. This deficiency directly influenced the enhancement of effluent quality (treated wastewater).



Leadership Tools to Operationalize Equity in the Medical Device Design Control Process

9:45am-10:30am

Presented by: Lori-Ann Archer, QAFE & Jenna Ceraso, Cornell University Biomedical Engineering Device Team (CUBMD)

Area of Focus: Transforming Leadership

Session Level: Advanced

Evidence reveals that bias is a prominent issue in the systematic design of biomedical devices. An example of this are faulty oximeters that mis-diagnosed patients during the COVID-19 pandemic. Biased devices result in unjust health disparities for individuals of marginalized communities. The current scope of the regulatory landscape does not include a holistic solution to build equity into the medical device development process. However, this presentation proposes a systematic process of building equity into all stages of the medical device design control process of FDA Quality System Regulations (21 CFR Part 820) and ISO 13485 regulatory requirements. Our proposed quality system improvements will provide tools for medical device leaders to be socially responsible in building equitable products to ensure medical devices are designed to diagnose and meet the needs of people in our diverse nation, not just a select few. Cornell University Biomedical Device (CUBMD) team's MelanOxi Pulse Oximeter will be used as an example during the presentation.

Supplier Auditing: 10 Common Mistakes & How To Sidestep Them

9:45am-10:30am

Presented by: Kellan Ilse, Quality Auditing LLC

Area of Focus: Tools and Beacons

Session Level: Intermediate

In today's world of complex supply chains and stringent regulations, effective supplier auditing is not just a compliance checkbox; it's mission-critical for product quality, safety, and customer trust. Yet, many organizations find themselves bogged down by ineffective audit processes and strategies, thereby questioning the return on investment of their programs. This session shines a spotlight on 10 pitfalls companies encounter in supplier auditing. But we won't stop at merely identifying the problems; we will arm you with actionable solutions. By transforming these common mistakes into learning opportunities, you'll elevate your supplier auditing program from a mere compliance requirement to a strategic advantage. Join us for this insightful session to optimize your approach to supplier auditing and make it a cornerstone of your quality management efforts.

Case Study

Case Study: Collecting Customer Feedback as a Small Company

9:45am-10:45am

Presented by: Teresa Cherry, Xenix Medical New Voice: yes

Area of Focus: Tools and Beacons

Session Level: Intermediate

As a small medical device company, we struggled with meeting the ISO requirements for customer feedback for our initial ISO audit. The first challenge was to clearly define our customers (vs end users). The second challenge was deciding the best questions to ask in a survey to get value added information. The third challenge was to get customer satisfaction surveys completed and returned to us. This session will review how we communicate with our customers and the lessons learned along the way (and we are not "there" yet).



Workshops

Meet The New Quality Tool on The Block: ChatGPT and AI!

9:45am-11:45am

Presented by: Zac Jarrard, Jarrard Consulting, LLC & Douglas Wood, DC Wood Consulting, LLC

Area of Focus: Tools and Beacons

Session Level: Basic

The world is on the cusp of a major workplace shift with automation and artificial intelligence (AI). The emergence of tools like ChatGPT have created a lot of opportunities for professionals and organizations. These tools are not going away and will continue to grow in use over time. This session will define artificial intelligence and why it is important in the workplace, examine ChatGPT and other AI tools that could help quality professionals, and reflect on opportunities where AI can add value at work. Participants will engage in hands on small group activities to explore the possibilities and limitations for AI in the workplace.

Strategy and Tools for Leadership and Culture Transformation

9:45am-11:45am

Presented by: Tony Belilovskiy, C3 Excellence, LLC

Area of Focus: Transforming Leadership

Session Level: Intermediate

This session is designed to make complex transformation much easier, the pace much faster, and the results bigger than anything you've seen. It is normal to attack single symptoms of organizational under-performance as if they are the root causes preventing excellence. Themes masquerading as the cure include process improvement, employee engagement, service responsiveness, waste and cost reduction, technology adoption, and performance measurement. As an insightful leader, you recognize true pursuit of excellence is multi-dimensional, constrained by organizational culture, and is a highly complex endeavor. The new leader is impatient to achieve "impossible" outcomes, excite customers, engage empowered employees and set new measures of success others can only dream about. It is a tall order requiring an entirely new focus, paradigm and tools. Success requires a transformation system as well as a systems approach to transformation. This session provides you with both. It starts with transforming how you envision excellence, showing how to achieve what you never thought possible, such as these repeated practitioner results:

- New monthly revenue of \$8 million
- Process time reductions of up to 80%
- Cost savings of \$20 million in two years
- Customers transformed into raving fans
- Dramatic improvement in employee selection, placement, performance
- Measurement of intangible knowledge work across the enterprise
- National & industry awards for excellence and best-in-class performance
- Engaged employees who view their work as a calling, not a job

This session is for members of the C-suite, change leaders, initiative champions and their teams responsible for conceiving and executing top-flight performance improvement and innovation your colleagues, customers and employees will notice, love and emulate. Leaders who benefit come from disciplines including quality management, government, healthcare, human resources, IT, customer service, marketing, product development, supply management, and many others.

Concurrent Sessions

Advancing Processes Health Assessment: Navigating Complex Challenges in the Modern Manufacturing

10:45am-11:30am

Presented by: Imran Rana, Treet Corporation

Area of Focus: Shaping Processes

Session Level: Intermediate

Building on the foundation of assessing process health and stability, my presentation aims to explore the nuanced challenges and rising demands faced by modern manufacturing operations, while providing advanced solutions to ensure process robustness and competitiveness.

Integrated Lean and Sustainability Framework to Enhance Continuous Improvement Efforts

10:45am-11:30am

Presented by: Sandy Furterer, Ohio State University & Elizabeth Cudney, Maryville University

Area of Focus: Tools and Beacons

Session Level: Intermediate

While organizations may desire to improve their impact on the environment; however, they lack a methodology for integrating Sustainability into their continuous improvement efforts. Lean is a concept to generate a continuous improvement system and eliminate waste throughout the organization from production to the supply chain, which improves quality, reduces costs, and adds value for customers. Lean focuses on increasing output with optimized usage of input resources by reducing waste and increasing process efficiency. Sustainable Green strategies focus on eliminating environmental wastes related to water, energy, air, and solid and hazardous waste. Lean and Green paradigms have a commonality in the context of waste reduction, continuous improvement, efficiency-driven improvement, and emphasis on cleaner production. This presentation will provide an integrated Lean Green Sustainability Framework. This framework includes Lean and Green Sustainability principles, tools, and methodologies from the quality improvement Plan-Do-Check-Act phases integrated with the circular economy 5 Rs of refuse, reflect, reduce, reuse, and recycle. The framework provides a simple yet powerful way to navigate Lean improvements that support Sustainability.

Measuring Up: Using Data the Right Way - Turning Data Into Information the Organization Can Use

10:45am-11:30am

Presented by: Howard Zwick, Z Operations Solutions & Manny Veloso, CI Consulting Services

Area of Focus: Shaping Processes

Session Level: Basic

Do you want to know how to turn data into information the organization can use? When we make people aware of the opportunities that exist with the data they already have, then people can learn to communicate performance in a way everyone can understand and act on. Join us on a journey as we explore the Who, What, When, Where, Why, and Hows of metrics (5 Ws and 2 Hs). Learn some of the tricks and tips with collecting, validating, and using the data that's all around us. Learn how to: - Know what information you need to assess and improve business performance - Assess strategies for analyzing and presenting data - Charting to make trends and changes meaningful and obvious - Determine historical performance and when something has changed in your process - Create effective feedback mechanisms to address problems as they occur rather than letting them fester This interactive session will share with participants different approaches and strategies to using data they already have, identifying data that they need and presenting this data to identify opportunities to improve. Different metrics presentation options will be explored. In this session, learn how to turn data into information that you can use to run the business and communicate with others.

Process and Systems Modeling for Complex Technical Process Improvement

10:45am-11:30am

Presented by: Jochen Amelsberg, APC International GmbH

Area of Focus: Shaping Processes

Session Level: Intermediate

This session provides an overview of how to apply process mapping and interaction or systems modeling approaches to understand and optimize technical processes in a complex environment. The session approaches both notations from a practical perspective to enable efficient root cause and statistical analysis with teams. The first part of the presentation introduces an extended notation for process modeling, which is especially suitable for understanding influence factors/parameters, target product characteristics and modeling their relationship in a technical process chain. The second part introduces interaction or system dynamics diagrams that can be used to visualize and model relationships in complex systems in order to prepare data collection and statistical analysis. The session also covers how to present findings. In practical application, these combined methods enable efficient handling of complexity for in-depth root cause analysis and fast optimization. The presentation is aimed at practitioners who want to optimize technical processes with many dependencies and factors in a practical environment. The approaches presented are tools for planning and visualization that deliver value for improvement teams and are practically proven to help achieve results in the context of Lean Six Sigma (DMAIC) projects and comparable methods.

Transforming the Quality Mindset of Leadership

10:45am-11:30am

Presented by: John Blankensop, AVIAN LLC

Area of Focus: Transforming Leadership

Session Level: Basic

In this concurrent session we will examine industry trends in organizational perceptions of leadership's level of involvement and support of quality. Next, we will review the quality management paradigms, fundamental principles and effective practices required to breakdown an organization's dysfunctional prevailing quality cultural belief system (BS) and transform individual business managers into quality minded leaders. We will then explore how this leadership transformation will in turn transform an organization's prevailing quality cultural belief system that promotes and advances a quality culture that demands flawless execution of the fundamental quality management principles and predictable achievement of quality objectives that delivers value through fulfilling the needs and expectations of the organizations relevant interested parties. This session will conclude with an examination of suggested actions that can be taken to impact leadership so leadership can impact quality.

Unpacking the Change Management Toolbox: Strengthening Transformation with Kotter's 8 Steps and More

10:45am-11:30am

Presented by: Frazier Pruitt, Southco

Area of Focus: Tools and Beacons

Session Level: Basic

In today's rapidly evolving business environment, embracing change is not just an option, but a necessity. As organizations grapple with transformational shifts, the need for a robust change management approach is evident. Yet, how can leaders ensure that change initiatives are not just surface-level, but deeply transformative? Enter the "Change Management Toolbox", an integrative framework inspired by Kotter's 8-Step Model, fortified with tools tailored for each step. This presentation delves deep, moving beyond mere theory, to provide actionable tools that amplify the potency of each of Kotter's steps. Using the Transformational Depth continuum, the presentation contrasts between superficial changes and those that redefine organizational DNA. This toolbox is not just about managing change; it's about championing it.

Case Study

FMEA-lite - A Tiered Triage Option to Deal With Lack of Data in High-mix-low-volume Environment

11am-12pm

Presented by: Gary Jing, Onto Innovation

Area of Focus: Tools and Beacons

Session Level: Advanced

In high-mix-low-volume environment, a major struggle in FMEA is lack of data to support meaningful risk scoring, particularly Occurrence and sometimes Detection. As an option, FMEA-lite can be considered to use simpler risk analysis technique to do initial risk assessment as triage, to improve efficiency and effectiveness. This advanced, tiered and solution-focused practice may not be acceptable in highly regulated or automotive industry, but can work well when FMEA isn't regulated (by agencies or customers). A paper version of this discussion will appear on ASQ Quality Progress soon.

Concurrent Sessions



New Paradigms in Medical Device Risk Management

1pm-1:45pm

Presented by: Jayet Moon, Terumo Medical & Arun Mathew, Abbvie

Area of Focus: Tools and Beacons

Session Level: Advanced

In this engaging session, we will delve into the latest risk management approaches to ensure the safety and effectiveness of medical devices, addressing key industry standards and regulatory requirements. Session Highlights: 📄 Exploring ISO 14971:2019: Understand the application of ISO 14971 standard and how to align organizational processes for effective compliance. Learn how to apply a comprehensive hazard based risk management process to identify, evaluate, and mitigate potential risks associated with medical devices. Learn the connection between FMEA and hazard analysis. 🌐 Navigating FDA Guidelines: Gain insights into the evolving FDA guidelines for medical device risk management with coming of QMSR. Discover how to align your risk management strategies with FDA expectations to accelerate approvals and ensure compliance. 🌐 EU MDR Compliance: Uncover the essential aspects of complying with the European Medical Device Regulation (EU MDR). Learn about risk assessment methodologies and documentation requirements to successfully get the CE mark. 🚀 Post Launch Surveillance: Explore emerging trends and innovative techniques for post market surveillance. Discover how to proactively manage risks throughout the entire lifecycle of your medical devices. 🤝 Collaborative Approaches: Understand the importance of cross-functional collaboration in modern risk management. Learn how to foster effective communication among design, engineering, quality assurance, and regulatory teams to achieve a holistic risk management strategy. Who Should Attend: This talk is designed for professionals involved in medical device development, quality assurance, regulatory affairs, and product management. Whether you're a seasoned expert or new to the field, this session offers valuable insights to elevate your risk management strategies and ensure the safety and success of your medical devices.



Ambidextrous Leadership - OPEX and Agile Mindset working together in Business Environment

1pm-1:45pm

Presented by: Alberto Pezeiro, Seta Training & Consulting

Area of Focus: Transforming Leadership

Session Level: Intermediate

Ambidextrous Leadership - using together Traditional Operational Excellence approach with Agile Frameworks to run Process Improvement projects and respond quickly to Business Changes . Using David Snowden 's Cynefin Framework as a guide to define the best methodology or framework to develop projects that will take Organization to a new level of Excellence and speed to deal with the changes . What are the kind of processes that get more advantage from a traditional Operational Excellence approach and what are the types of projects that can take advantage of an Agile Mindset approach . Examples of Organization that have already adopted Ambidextrous Leadership . What were the main gains and obstacles ? Is it true that Agile Frameworks deliver fast results to Organizations when compared to traditional OPEX methodologies ? Are the quality of the results the same ? Understand how to train the whole Organization to take the best of Ambidextrous Leadership and how to guarantee that concept is applied and absorbed by Leaders.

Got Data? Build KPIs that Drive Business Improvement

1pm-1:45pm

Presented by: Rho Olaisen, Case Western Reserve University & Bob Napoletano, SRC Inc

Area of Focus: Tools and Beacons

Session Level: Basic

Does your organization view internal performance metrics as an opportunity to improve or just another checkmark? Does your data process include employee engagement? Do your managers understand your customers, suppliers, and the key processes that drive strategy? Do we collect too much data that is not used to improve? You observe a KPI below threshold and now you need to spend resources to fix whatever caused the problem, but does that KPI have value? The problem found impacts your ability to gain organizational effectiveness and hinders all fashion of enterprise activities. We should be looking at KPIs as a tool in our overall quality improvement process. While KPIs are historically static in nature, if we look at KPIs from a dynamic perspective, we can see that if done right problems can be avoided, and we can apply lessons learned to other services or systems, so they too won't hold back the organization's potential. If done correctly, it engages the workforce in the improvement process, spreading trust and loyalty throughout the company.



Moving from Healthcare Service Performance Measurement to Performance Management

1pm-1:45pm

Presented by: Somia Elfaki, HMC

Area of Focus: Shaping Processes

Session Level: Intermediate

Performance measurement and management are two related but distinct concepts in healthcare. They are critical to ensuring that healthcare organizations deliver high-quality care efficiently and effectively. Performance measurement refers to the process of collecting and analysing data on the quality and efficiency of healthcare services. It involves setting specific, measurable goals/targets and collecting data on how well they are being met. On the other hand, performance management is a broader term that refers to the systematic process of improving the performance of healthcare organizations. The session will provide the fundamental knowledge of Healthcare Performance Management and its importance in healthcare. The major components of the performance management framework will be explained. It is also will discuss standard performance metrics used in healthcare. These metrics provide a snapshot of the quality and efficiency of healthcare services and can be used to identify areas for improvement. It's also helpful to discuss the importance of aligning performance metrics with organizational goals/priorities and the need to regularly review and update metrics to ensure they remain relevant and valuable. In the second part of the session, I will discuss strategies for implementing effective performance management systems. This will include highlighting the role of leadership in setting goals and targets and the importance of involving front-line staff in the process. It will discuss the use of data analytics and QI tools to support service performance management. By joining this session, you'll gain the basic knowledge and tools to navigate Healthcare Performance Management and enhance healthcare delivery.



Unlocking Quality in Virtual Workspaces with 7 QC Tools

1pm-1:45pm

Presented by: Gurpreetsingh Saini, Molex LLC

Area of Focus: Tools and Beacons

Session Level: Basic

Discover the transformative potential of implementing the 7 Quality Control (QC) tools in virtual workspaces. This dynamic presentation delves into the practical integration of these tools, enabling teams to uphold quality standards, drive improvements, and conquer challenges associated with remote work. Key Highlights: 1. Navigating Virtual Terrain with QC Tools: Dive into the significance of applying QC tools in virtual workspaces. Learn how these tools empower teams to maintain consistent quality, elevate customer satisfaction, and optimize processes in the virtual landscape. 2. Customized Solutions for Virtual Challenges: Uncover innovative solutions for common virtual work challenges like communication barriers and collaborative limitations. Witness how each QC tool offers tailored approaches to overcome these obstacles. 3. Versatile Applications and Collaboration: Explore the versatile nature of QC tools. From Microsoft Suite apps to virtual whiteboarding platforms, witness their seamless integration for effective implementation. Collaborative engagement is spotlighted, fostering alignment and collective decision-making. 4. Empowering Remote Teams: Witness the transformation of remote teams as they embrace QC tools. Empower your virtual workforce to harness these tools, maintaining quality, driving improvements, and achieving excellence irrespective of geographical constraints. 5. A Culture of Learning and Innovation: Embrace the ethos of continuous improvement. Discover how QC implementation cultivates a culture of learning and innovation, propelling your virtual teams towards growth and ingenuity. 6. Closing Thoughts: Quality as the Cornerstone: Conclude your journey through this presentation with a profound reminder that quality remains central to remote work endeavors. Gain confidence to embark on your virtual QC journey, fostering excellence and innovation. Unlock the power of the 7 QC tools in virtual workspaces. Join us in this enlightening exploration, where quality meets technology to shape the future of remote collaboration.

Innovating Quality: Integrating AI-ChatGPT with Operational Excellence and Lean Six Sigma

1pm-1:45pm

Presented by: John Ngo, J&P Global

Area of Focus: Tools and Beacons

Session Level: Basic

Discover the Future of Consulting: Uniting AI-ChatGPT with Operational Excellence and Lean Six Sigma As we embark on a journey through the convergence of AI intelligence and established methodologies, attendees will gain profound insights into the following areas: 1. **AI-Assisted Problem Solving**: Discover how AI-ChatGPT can be harnessed to tackle complex challenges within the consulting domain. Through real-world examples, learn how AI-driven problem-solving augments the prowess of Operational Excellence and Lean Six Sigma methodologies, fostering a symbiotic relationship that produces innovative solutions. 2. **Precision Decision-Making**: Delve into the art of informed decision-making, amplified by the integration of AI and proven consulting practices. Understand how AI-ChatGPT transforms data into actionable insights, empowering leaders to make decisions that resonate with long-term objectives while navigating dynamic market conditions. 3. **Next-Generation Process Optimization**: Witness how the infusion of AI elevates process optimization strategies, allowing businesses to streamline operations and boost overall efficiency. The session will showcase successful case studies of organizations that have harnessed this combination to drive quantifiable improvements in quality, throughput, and customer satisfaction. 4. **Collaborative Learning in the Digital Era**: Explore the role of AI in fostering collaborative learning environments. Learn how AI-ChatGPT acts as a catalyst for knowledge sharing, enabling consultants, mentors, and professionals to engage in meaningful dialogues that accelerate growth and innovation. 5. **Human-Centric AI Integration**: Understand the ethics and best practices of AI incorporation in a human-centric consulting landscape. Delve into considerations such as data privacy, responsible AI usage, and maintaining the delicate balance between technological advancement and human intuition. **Innovating Quality: Integrating AI-ChatGPT with Operational Excellence and Lean Six Sigma** is your gateway to a future where artificial intelligence harmonizes with established consulting practices, paving the way for unparalleled success in an ever-evolving business landscape. Seize this opportunity to redefine your approach to consulting, quality, and leadership – all through the lens of transformative AI integration.

Case Study

Saving the Mega Blaster from Disaster- Multi-response Optimization at Hasbro Corporation

1pm-2pm

Presented by: Louis Johnson, JMC Data Experts, Inc

Area of Focus: Tools and Beacons

Session Level: Advanced

A multi-million product line was in jeopardy at Hasbro. Their Mega Blaster foam ball launcher might sound like child's play to some, but the product design team knew it was a difficult mechanism to control with nine mechanical variables having a direct effect on four key outputs. Unknown to them, through the years, their overseas contract supplier had been re-engineering their product and now produced competitors that shot faster, straighter, more safe and cheaper than the original. Playing catch-up, product Quality had to improve, and fast. With an inferior product to improve, the experiment design team had to consider all inputs because variables that might not have an effect on one response could be key drivers to another. Also, no one knew where interactions were going to come into play. In the end, researchers had to deal with the complexity of a comprehensive approach, hard to change factors, blocking, mechanism stability over weeks of testing and high measurement variability. Their success story will inspire experienced and novice researchers alike.

Workshops



People Power, Return on Kindness, and Performance Excellence

1pm-3pm

Presented by: Vaidesh Subramanyam, Analysis and Implementation of Management Systems

Area of Focus: Transforming Leadership

Session Level: Advanced

The interactive workshop will focus on explaining the core elements of Performance Excellence by synthesizing key concepts from Leadership Transformation Model, Profound Knowledge, Value Creating Zone Framework, and Systems Thinking. An explanation of the key concepts that determine System Performance including the fundamental need for leaders to lead as a coach, mentor, and trainer, the need to flatten the power gradient within organizations by shifting authority to the true value creators, and the need for Hoshin orientation will be accompanied by actionable insights. An application of the Double Loop adult learning model will be expounded using the Ladder of Inference to demonstrate how to build sustained organizational problem-solving capabilities. The concept of Respect for People will be used as a basis to explain the forward-thinking idea of Return on Kindness. The presentation will contain practical examples from the worlds of pharmacy, healthcare, engineering, and plant propagation that demonstrate the key concepts in an interactive manner.

The Science and Art of Being an Engaging Leader

1pm-3pm

Presented by: Micahel J. O'Brien, The Blueprint Toolset & Laura Kinney, MBA, Performance Excellence

Area of Focus: Transforming Leadership

Session Level: Intermediate

With the great resignation and quiet quitting, as well as changing expectations of the workforce, managers and team leaders are experiencing even more challenges to retain good people. Leaders' abilities to engage their teams is more important now than ever before. This highly interactive session integrates neuroscience with proven strategies that enable participants to engage their teams more effectively. Are you engaging or constraining your employees or teams? Come to this workshop to find out! Theory (SCARF by Dr David Rock) is presented, exercises are completed individually and then by tables, with concepts being introduced, tried out and learnings reported out by table (not 2 hours of lecture). This workshop is industry agnostic – applicable to all industries and sectors.

Concurrent Sessions



Risk Management for Software as a Medical Device

2:00pm-2:45pm

Presented by: Ibi Aseyori, ASCEND Cardiovascular

Area of Focus: Shaping Processes

Session Level: Intermediate

The risk management process for hardware medical devices should be different from the risk management process for software as a medical device. This presentation will explain the differences between risk management processes for hardware vs software medical devices and provide helpful tips and recommendations for manufacturers/developers of software as a medical device who may be struggling with this design control regulatory requirement.

Automating Quality Tasks using Programming Languages with Examples in R

2:00pm-2:45pm

Presented by: Jameson Marriott, L3Harris

Area of Focus: Tools and Beacons

Session Level: Basic

Programming languages are not as hard to learn as you think that they can help you in your daily work. You do not need to be an IT professional or a computer science major to learn one, and once you learn the basics, a whole new world of productivity is opened to you. When you use programming best practices, the code naturally documents processes in a way that provides consistency and business continuity. Learning to code in a productive programming language makes you a more valuable employee and teammate and gives you credibility. This presentation will cover the introductory basics of learning all programming languages, where to find the resources that you need, and which language might be the best one for you to start with.

Beyond Root Causes: Harnessing the Power of the Ishikawa Diagram for Quality Enhancement

2:00pm-2:45pm

Presented by: Colleen McGuigan, Consultant

Area of Focus: Tools and Beacons

Session Level: Basic

Ishikawa diagrams, also known as cause-and-effect diagrams or Fishbone diagrams, are traditionally used for root cause analysis. The structure of the diagram assists quality professionals to identify the underlying causes of a known problem. Traditionally organized into categories like people, materials, machinery, environment, methods, and measurement, these diagrams provide a clear, visual representation of contributing factors. But there are other uses for the Ishikawa Diagram. Process Improvements can be targeted using the Ishikawa diagram to identify bottlenecks and potential causes of delays or errors. When creating quality audit plans, the Ishikawa diagram can assist auditors in ensuring that all relevant areas are covered in their questioning. Risks can be managed through identification of potential sources of risk such as technical, environmental, human, and organizational, assisting quality professionals in preventing these potential quality issues. Moving slightly away from traditional quality applications, Ishikawa diagrams can help with crisis preparedness. Mapping potential causes of various crises can assist organizations to develop comprehensive response strategies. Through examples and discussion, we will explore different ways to use this Basic Quality Tool.

Integrating Emerging Technologies and Classic Quality Tools for Supply Chain Operations Excellence

2:00pm-2:45pm

Presented by: Alper Senol, Miami Dade College & Ahmad Elshennawy, University of Central Florida

Area of Focus: Tools and Beacons

Session Level: Advanced

This research investigates the incorporation of well-established quality approaches with Industry 4.0, aiming to create a strategic plan for achieving high performance in supply chains. The article explores the influence of emerging technologies such as AI, machine learning, and data science on supply chains, illustrating how sophisticated data analysis enables informed decisions and immediate insights for tackling quality concerns. Additionally, the investigation explores the transformative impact of inventive technologies such as IoT, CPS, RFID, cloud systems, self-governing robots, along with augmented, extended, and virtual reality, blockchain, and cybersecurity, in reshaping the quality aspects of supply chains by means of continuous monitoring and transparency. The study underscores the importance of programming languages like Python, R, and MATLAB for proficient data processing and algorithm creation, ultimately enhancing decision-making and the overall performance of supply chains, which also includes the incorporation of Statistical Process Control for quality supervision. In essence, the research presents a holistic strategy for achieving operational excellence through the fusion of established quality methodologies and emerging technological advancements in the field of supply chain management.

Happiness, Well-being & Quality Outcomes: the key Role of Performance Improvement in Healthcare

2:00pm-2:45pm

Presented by: Graciela Perez & India Smalls, ASQ Healthcare Division

Area of Focus: Shaping Processes

Session Level: Intermediate

We present an essay that delves into the interplay between happiness and healthcare quality of services. It holds transformative potential as the alignment of well-being with excellence in patient care emerges as a powerful paradigm shift, offering benefits not only to healthcare professionals but also to the overall patient experience. The Institute of Medicine's dimensions of quality healthcare, with an emphasis on evidence-based practices and patient safety, underscores the connection between well-being and care excellence. The evidence linking physician burnout to compromised patient care outcomes suggest the need of prioritizing the well-being of healthcare professionals. The components of well-being are presented as integral building blocks in the broader framework of healthcare. Research studies designed to elevate healthcare quality, exemplified by "healthy workplaces" and the insights from research on the substantial costs of physician burnout, highlight the need of fostering efficiency, cultivating leadership, and nurturing a sense of community. Positive psychology strategies, including gratitude, positive reflections, physical well-being prioritization, and social connection cultivation, offer a blueprint for rewiring neural pathways towards sustained happiness. Within the healthcare realm, the cultivation of heightened happiness translates into increased personnel engagement, consequently exerting a positive impact on diverse dimensions of care quality. Establishing a well-being-centric culture necessitates concerted efforts across senior leadership, governance structures, and interdepartmental collaborations, by which healthcare institutions can foster a holistic ecosystem that promotes the well-being of all stakeholders. The role of quality improvement experts is emphasized in utilizing their expertise to design and implement strategies that bridge the well-being of healthcare providers with patient outcomes.

Transitioning to Data-Driven Quality As A Service (DDQaaS)

2pm-2:45pm

Presented by: Daniel Zrymiak, Westgate Technology

Area of Focus: Tools and Beacons

Session Level: Advanced

Legacy model of Quality as a Staff Function is limiting due to these disadvantages - Task-oriented (Steps and Tests Performed) - Time-boxed - Reactive, after-the-fact responses Shift to Data-Driven Quality As A Service mindset - Servant-leader and subject-expert for other functions - Data-driven orientation to organization, product, and project context - Outcomes oriented (Definition of Done) - Set prerequisites (Definition of Ready) Cost and budget changes - Shift funding to reflect steady state and peak states - Promote early-stage practices (i.e. Shift-Left in product development) when Quality intervention has lower costs. - Services can be automated, move to self-serve or on-demand models - Staff and fund according to data-driven demands Summary - Moving to a data-driven service model reduces overhead and fixed costs, and makes the operations more nimble.

Case Study



Using Six Sigma DMAIC Process To Target Pharmaceutical Tablet Dissolution – A Case Study

2:15pm-3:15pm

Presented by: Robert (Bob) Pintavalle, B&T Quality Management Consulting

Area of Focus: Shaping Processes

Session Level: Advanced

This session will present a case study by sequentially moving through the stages of the Six Sigma Define, Measure, Analyze, Improve, Control (DMAIC) process. Participants will see the power of the Six Sigma DMAIC process in solving complex real world manufacturing problems. Throughout the presentation, participants will see how the DMAIC process and related tools could be used in their own organization to solve manufacturing issues. Emphasis will be given to the define, measure, and analyze phases that were critical to making this project a success. Upon completion of this session, you will take-away: • Leadership commitment and how leadership can show it. • How to use existing available data to evaluate a process. • The use of statistical methods, including design of experiments, to solve process issues.

After 5 Sessions

Speed Networking and Building Business Relationships

5pm-6pm

Presented by: Eric Hayler, Hayler Group

Area of Focus: Tools and Beacons

Session Level: Basic

Building business relationships begins with first introductions. While the technical content of the ASQ World Conference on Quality and Improvement is outstanding, if you don't take advantage of the networking opportunities, you will be missing half the value! This session will feature a speed networking exercise. It's like speed dating but with a focus on professional relationships. Have fun, meet new people like yourself, and pick-up some tips on building business relationships.

Unlock Your Potential with Speed Group Learning

5pm-6pm

Presented by: Johanna Rusly, JOPROJECTS

Area of Focus: Transforming Leadership

Session Level: Basic

What are the factors that motivate us to learn anything? Is it driven by a passion, interest, or need to help us solve and improve the work that we do? Let's unlock your potential by participating in this interactive, fun, and engaging speed learning session. You'll learn interesting topics, from art, leadership, music to technology with your teams, and share your newly acquired knowledge and skills with all other participants in the workshop.

Tuesday, May 14th

Concurrent Sessions



Revolutionizing Quality Control: Exploring the Power of AR/VR in Quality 4.0

9:45am-10:30am

Presented by: Hayriye Merve Yurdacan, Meta

Area of Focus: Tools and Beacons

Session Level: Intermediate

In a landscape defined by innovation and heightened expectations, the role of quality control takes on unprecedented significance. It guards the integrity of products and processes, ensuring that excellence remains an unwavering standard. This task is further magnified in the age of Industry 4.0, where the convergence of advanced technologies and data-driven practices is reshaping the foundation of manufacturing and quality assurance. As we navigate this transformative era, it becomes evident that addressing modern quality challenges demands a fresh perspective – one that combines technological power with the art of precision. As manufacturing becomes increasingly complex and customer expectations reach new heights, quality control faces an array of modern challenges. The complexity of products, with their intricate designs and diverse materials, demands meticulous inspection to maintain the highest standards. Additionally, customization introduces the need for flawless quality assurance in the production of unique, individualized products. In this landscape, quality control processes are required to accommodate real-time data analysis, seamless communication across teams, and the rapid identification and resolution of defects. The traditional methods that once sufficed may now struggle to keep pace with the rapid evolutions of modern industry. Augmented Reality (AR) and Virtual Reality (VR) technologies emerge as beacons of promise, poised to revolutionize quality control in unprecedented ways. They present a paradigm shift in how we approach the complexities of quality assurance. Join us in this conference session where you'll be immersed in the world of modern quality control challenges. Discover how the creative integration of AR/VR technologies addresses these challenges with real-life stories that will captivate your imagination. As we journey together, you'll gain insights into the future horizon of quality assurance.

DOE Unmasked! If a 4th Grader Can Do It...So Can You

9:45am-10:30am

Presented by: Jd Marhevko, ZF Group, Div U

Area of Focus: Shaping Processes

Session Level: Basic

Have fun and work out a sample Design of Experiments (DOE) with 3 variables and 2 levels...by hand! Understand the "secrets" behind figuring out the interaction graphs of the DOE. We'll use live data and results so you can "plug and chug" along with the best of them. Put yourself in a position to really leverage a powerful tool that can, at times, be deceivingly complex. Come and enjoy...and surprise yourself, as well as others! This is an interactive session where participants will be asked to engage in the process.



Creating and Sustaining Communities of Excellence Using a Baldrige-Based Framework

9:45am-10:30am

Presented by: Stephanie Norling, Communities of Excellence 2026

Area of Focus: Transforming Leadership

Session Level: Basic

In 2013, two U.S. healthcare leaders developed the hypothesis that the Baldrige framework, proven to drive performance excellence in organizations and businesses, could be adapted to transform how communities are run and improve community outcomes related to health and wellness, educational attainment, economic vitality, and other aspects of quality of life. Using case studies, this session will help explore how this vision is now being realized in communities across America bringing leaders in different organizations and sectors together to create community solutions that can't be achieved by a single sector or organization alone.

NeuroLeadership: The Neuroscience Behind Being a Better Boss

9:45am-10:30am

Presented by: CHRISTIANNA HAYES, Impact Performance Solutions

Area of Focus: Transforming Leadership

Session Level: Intermediate

NeuroLeadership is a new field of study drawing on the latest brain research to improve the quality of leadership and leadership development. The field is based on the neuroscience of four leadership activities: how leaders make decisions and solve problems, regulate their emotions, collaborate with others and facilitate change. This session introduces the history and evolution of neuroleadership, deep dives into the four leadership activities mentioned above, and explores topics that include research on regulating emotion under pressure, the brain's threat response, the neuroscience of employee engagement and David Rock's SCARF Model, an easy way to remember the five major domains across which people assess stimuli as "good" or "bad," rewards or threats. The acronym "SCARF" stands for status, certainty, autonomy, relatedness, and fairness. Participants will receive an electronic copy of the SCARF Model and a guide to implementing neuroleadership practices in specific workplace situations.

Leading to Excel - High Reliability

9:45am-10:30am

Presented by: Richard Morrow, RPM EXEC

Area of Focus: Transforming Leadership

Session Level: Intermediate

Leading to Excel is Richard's fourth book publishing in 2024 and demystifies how leaders develop High Reliability Organizations (HROs.) HROs are industry leaders which lead their industries in performance and do not fail, or if they do, fail less severely. They become role models how to perform reliably every time while learning how to prevent future failures. HROs can exist in every industry case studies will include achievements in the industries of power distribution, automotive, aviation, aerospace, telecommunications, healthcare, banking, insurance, and music performance. Richard's leadership experience and success in HROs in these industries will initiate this interactive session resulting in every participant an opportunity to leave with a plan to lead their team in becoming a High Reliability Organization. Debunking myths along the way makes this session even more valuable by preventing wasting time on fads, "Show-off" terms foreign to the organization, and unvalidated methods to achieve reliability. Participants will discover necessary HRO abilities in predictive analytics, risk management, quality, customer and employee satisfaction, and stakeholder inclusion and how to mature in these and other attributes. "Take-aways" will include Richard's Lean Six Sigma & Change Leadership Road Map and tips from each of his three publications.

The Component Search Study - Leverage the Contrast

9:45am-10:30am

Presented by: Scott Sterbenz, Ford Motor Company

Area of Focus: Tools and Beacons

Session Level: Advanced

When problem solving, identifying contrast in the key process output variable (KPOV) is an important goal in the Measure phase. This contrast is the Black Belt's best friend, and the way in which that contrast is leveraged is important to efficiently identify root cause. The component search study is one way to leverage contrast, and is especially effective with assemblies with multiple components (manufacturing) or processes with multiple steps (transactional). Often referred to as a Best-of-the-Best (BOB) / Worst-of-the-Worst (WOW) study, the process systematically determines the source of the contrast. Successful execution of a component search study is to get the BOB to act like the WOW and the WOW to act like the BOB--called a complete reversal. This presentation shows the problem solver how to set up and complete a component swap study and how to use basic statistics to validate the results and illustrate the contribution of each component or process step to the overall contrast. Leverage your contrast by learning how to use the component search!

Case Study



Building a Quality Unit in a Federal Law Enforcement Organization

9:45am-10:45am

Presented by: Robert Boland, ATF NCETR

Area of Focus: Shaping Processes

Session Level: Basic

This case study presentation lays the ground work for how the Bureau of Alcohol, Tobacco, Firearms & Explosives, National Center for Explosives Training & Research, located in Huntsville, Alabama, needed to design, develop, and implement an ISO 9001-conforming Quality Management System as part of its desire to seek out ISO accreditation, and other valid credentialing such as the ANSI/ASQ G1 Standard.

Workshops



Your Leadership Journey: How to Drive Excellence Across Teams

9:45am-11:45am

Presented by: Jennifer Mascioli-Tudor, JMT Advisors

Area of Focus: Transforming Leadership

Session Level: Intermediate

Teams and organizations are evolving and in order to stay ahead of the curve to retain and provide growth opportunities, leaders have to learn new methods to drive organizational excellence across their teams. In this session, we will focus on what leaders can focus on to drive the next level of engagement, growth and innovation across their teams.

Risk Management - Application of Tools for Oversight, Assessment, & Control

9:45am-11:45am

Presented by: Mark Lindsey, Disneyland

Area of Focus: Tools and Beacons

Session Level: Basic

This session will cover the ASQ Certified Quality Engineer Body of Knowledge topic on Risk Management which was recently updated based on the ISO 9001-2015. Session will cover examples of various Risk Management Tools in addition to ISO 31000 and the FDA Q9 guidelines on Risk Management. The workshop portion will allow participants to form into groups to conduct an exercise on one or more of the tools listed below. CQE BoK Topics on Risk Management that will be covered: A. Risk Oversight (Planning and Oversight, Metrics, & Mitigation planning) B. Risk Assessment (Categorization Methods and Evaluation Tools to assess risk) C. Risk Control (Identification and Documentation & Auditing and Testing) FDA Q9 guidelines that will be covered: • Risk Management Process • Risk Management Methodology • Integration of Quality Risk Management Into Industry • Risk Management Methods And Tools. o Failure Mode Effects Analysis FMEA (Design FMEA & Process FMEA) o Fault Tree Analysis (FTA) o Hazard Analysis and Critical Control Points (HACCP) o Hazard Operability Analysis (HAZOP) o Preliminary Hazard Analysis (PHA) o Control Plans

Concurrent Sessions

Utilizing Animal Behavior to Inspire Exceptional Levels of Individual and Organizational Performance

10:45am-11:30am

Presented by: Russell Roberson, University of Wisconsin

Area of Focus: Transforming Leadership

Session Level: Intermediate

The lessons of nature, and specifically, animals [bears, elephants, giraffes, penguins, and beavers], have much to teach us about understanding and utilizing our 1) environments, 2) strengths and weaknesses, and 3) passions to help a) plan for, b) act upon, c) achieve, and d) sustain a culture that produces a competitive advantage for the products and services delivered to a waiting customer. We will examine animal behaviors and link directly to the environments and endeavors of quality and regulatory professional. Participants will take away the concepts of 1) by stepping outside our current way of thinking, we open ourselves up to new ways to see our environments and make the professional impact we desire, 2) that the path towards individual and organizational growth can be found by looking at the history, norms, and logical processes that happen in the animal world, and 3) that the elegance and balance of nature can be applied directly to our roles and our responsibilities as quality and regulatory professionals. In addition, this presentation will inspire you to visit your local zoo to learn more about animal behaviors.



Morph and Pugh Matrices for Concept Development and Selection

10:45am-11:30am

Presented by: Jeff Opperman, JR Automation

Area of Focus: Tools and Beacons

Session Level: Basic

Creating a lasting solution starts with choosing the concept that best satisfies customer requirements. Using the Morph Matrix for brainstorming and concept development, followed by the Pugh Matrix for concept selection will help ensure your team makes the right concept choice from which to begin its detailed design, whether you are launching a new product, process, or service.

Leveraging Quality & ISO 14001 to Address Emerging Environmental Management & Sustainability Issues

10:45am-11:30am

Presented by: Susan Briggs, SLK Briggs, LLC & Dr. Lisa Greenwood, Rochester Institute of Technology

Area of Focus: Transforming Leadership

Session Level: Intermediate

Quality professionals play a key role in building processes to enhance resilience in their organizations. This can include processes to manage risk across the value chain, as well as to prepare for and respond to the ever-increasing environmental sustainability challenges their organizations are tackling, now and in the future. A panel of ISO international experts will engage with participants and share insights, experiences and examples of how Quality professionals can leverage Quality systems to successfully address emerging environmental management and sustainability challenges. Issues include: • Upcoming changes to the ISO 14001 Environmental Management Systems standard. • Opportunities for integrating Quality Management Systems and Environmental Management Systems. • Supporting Organizational Leaders to fulfill their roles and achieve strategic objectives related to environmental sustainability. • Addressing Management of Change. • Building organizational resilience to climate change through climate adaptation and mitigation. • Incorporating environmental criteria into product specifications to mitigate adverse environmental impacts across the product lifecycle. • Resources available to Quality Professionals to support their organizations' sustainability initiatives.

Coaching Kata - hammer or nail?

New perspectives on an important lean tool.

10:45am-11:30am

Presented by: Richard Uphoff, The Vanguard Group

Area of Focus: Tools and Beacons

Session Level: Intermediate

Coaching Kata can be a very powerful tool for improvement. By taking a methodical, scientific approach, it can help people and teams achieve important results. But when, as the American Psychologist Abraham Maslow famously said, "the only tool you have is a hammer, you tend to see every problem as a nail." The literature and practice of Coaching Kata, as effective as they are, often believe improvement is inevitable. The assumption is that applying the methods always results in progress. However, as any experienced leader knows, this is not the case. Despite our best efforts, progress may come in fits and starts or not at all. Life happens. Leaders and coaches are busy. People may get better with consistent coaching but slip back over time. A leader needs to see Coaching Kata as one tool in a broader context of performance management. This session seeks to show how Coaching Kata fits into a broader framework of performance coaching and overall improvement management.

Demystifying AI: Practical Applications and Future Prospects for Quality Management

10:45am-11:30am

Presented by: Joseph Licata, TDK-Lambda

Area of Focus: Tools and Beacons

Session Level: Basic

Delve into the world of Artificial Intelligence (AI) and its applications in quality management with this interactive session at WCQI 2024. Targeted at quality professionals, this session will demystify AI, breaking down its complexities into understandable concepts. The session begins by setting a strong foundation, explaining the current state of AI and its evolution, with a particular focus on transformer models and the unique capabilities of tools like chatGPT. From there, we'll delve into the challenges and concerns surrounding AI, such as data privacy and accuracy, providing attendees with a balanced perspective. The core of the session will explore practical applications of AI in quality management, from document QA and internal audit support to customer responses and technical writing. Attendees will learn how AI can enhance their workflow, improve efficiency, and drive quality outcomes. The session concludes with a look at the future, emphasizing the importance of understanding AI's first principles for success in the rapidly evolving landscape. Attendees will leave with a solid understanding of AI, its potential, and its practical applications in quality management.

The Future of RCA: Machine Learning-Driven Root Cause Discovery

10:45am-11:30am

Presented by: Peg Pennington, MoreSteam

Area of Focus: Tools and Beacons

Session Level: Intermediate

Root Cause Analysis is a critical skill that all organizations need to possess and expand to succeed in today's ever-changing, complex environment. With the advancement of the digital age, immense amounts of data are captured constantly. While this creates an opportunity to understand issues at more profound confidence levels, it comes with new challenges. The sheer volume of data at our disposal has brought about a surge in irrelevant information (or noise), increasing the need for filters and levels of focus unlike anything we've encountered before. This presentation will discuss the fusion of traditional root cause analysis with the power of machine learning and why it's critical to the success of our continuous improvement efforts moving forward. We'll talk about the goals of root cause analysis and how machine learning can empower us in our root cause discoveries.

Case Study

No More Panicking: Implementing the Performance Excellence Framework for Continuous Magnet Readiness

11am-12pm

Presented by: Rowena Chona Sano, Memorial Hermann Greater Heights & Judy Ho, Memorial Hermann Health System

Area of Focus: Shaping Processes

Session Level: Intermediate

The American Nurses Credentialing Center (ANCC) Magnet Recognition Program designation is a recognition of nursing excellence in healthcare organizations in the United States and all over the world. Only about 10% of US hospitals are awarded this recognition in 2023. Consumers consider the Magnet recognition as an ultimate credential for high quality nursing and patient care. Preparing an organization for its Magnet Recognition Program journey – both the application submission and site visit can be stressful for the nurse leaders and clinical nurses. The purpose of this presentation is to describe how one healthcare organization utilizes the Baldrige performance excellence framework to continuously and systematically meet the standards for Magnet designation. This presentation will give examples of how Baldrige framework enculturates the Magnet® standards and supports documentation of Magnet® criteria. In addition, it augmented the role of the Magnet Program Director. The Magnet standards consist of the Empirical Outcomes (EO) and non-EO standards. The non-EO standards usually starts with “provide one example, with supporting evidence, of the”. Using the process evaluation factors, of the Baldrige performance excellence framework, we asked ourselves: What is our approach (A) to meeting the standard? Where and how is our approach deployed (D)? What have we learned (L) from using our current approach? How is the approach integrated (I) with our mission, vision, values, strategic initiatives or interprofessional work systems? The EO standards require the identification of a problem, pre-intervention data and activities, goal statement, participants list, interventions, and outcomes. The EO standard also have specific data display requirements which are supported by using the evaluation factors. They are levels (L), trends (T), Comparison (C), and Integration (I). The outcomes include minimal deficiencies noted on its written application and the achievement of exemplary recognition. Lessons learned include further training of both Magnet standards and Baldrige framework to nursing leaders. Another cycle of learning includes hardwiring the adoption of the Magnet standards into our daily operations. The key takeaway is utilizing a systematic, pro-active, and well-developed performance framework such as Baldrige assisted the organization in meeting the Magnet standards, receiving re-designation, and made the journey enjoyable.

Concurrent Sessions

Process Intelligence (PQ): The Key to Building High Functioning Leaders

2pm-2:45pm

Presented by: Shane Yount, Competitive Solutions Inc.

Area of Focus: Transforming Leadership

Session Level: Intermediate

Leadership development is a well-known practice, but the challenges of the past few years have brought unprecedented strains on leaders and organizations. As leadership fatigue reaches new heights and the "Great Resignation" becomes a reality, it's clear that the leaders of tomorrow need more than just IQ and EQ. This session will delve into the concept of Process Intelligence (PQ) as the secret to building and sustaining "High Functioning Leaders." PQ is the key element that enables leaders to embrace and sustain change, inspire accountability, and leave a lasting legacy.



Leading Knowledge: Requirements for Finally Managing Knowledge like an Asset

2pm-2:45pm

Presented by: Wayne Levin, Predictum Inc.

Area of Focus: Transforming Leadership

Session Level: Intermediate

In many organizations, knowledge isn't handled like any other valuable asset. Imagine the way equipment, raw materials, final products, and financial investments are carefully managed. Each asset has its unique identity, and systematic monitoring with processes in place to track their performance, even up to the board of directors. However, knowledge is often treated differently. Knowledge work produces predictive tools. These take various forms such as standard operating procedures, forecasts, instructions, and predictive models. Yet, knowledge work tends to be scattered across analysts' laptops, who create them. Commonly lacking standards, searching for past knowledge becomes nearly impossible for many. This results in unnecessary duplication of efforts, inflating costs, and causing delays in achieving business goals. Excitingly, there are emerging opportunities, particularly in the field of machine learning. This involves leveraging previously unrelated knowledge work to uncover novel insights and address challenges without significant extra costs or effort. Managing knowledge like any other asset ensures that previously generated knowledge is easily accessible, ready to tackle unexpected problems and challenges. It also involves maintaining detailed, interconnected records about its development, purpose, and ongoing accuracy checks. Active knowledge management prompts updates when predictions fall short. This presentation will explore the requirements for treating knowledge as a valuable asset. By doing so, it enhances analytical productivity and, consequently, the overall productivity of the entire organization.



Risk Management for Batteries: Development and Manufacturing

2pm-2:45pm

Presented by: Barbara Armstrong & Greg Zinkel, Electra Energy Group

Area of Focus: Shaping Processes

Session Level: Intermediate

The world depends on battery systems to power critical devices and that dependency will only increase in the future. For reliability in batteries, strict parameters must be established and maintained to avoid catastrophic losses and to minimize total cost. Industry examples to be discussed include reliability issues of UPS (Uninterruptible Power Supply) for data centers and EV (Electric Vehicles) manufacturing problems. Component risk reduction steps that manufacturers of the battery components or systems can employ are discussed including Quality Control methods, Process Failure Mode and Effects Analysis and ongoing reliability testing using statistical sampling. System risk reduction may include redundancy, System Failure Mode and Effects Analysis and strict Supplier Quality practices to maintain system performance. Most battery problems, however, stem from product development. Companies struggle to incorporate quality systems in the face of cost and schedule pressures. Often, quality is an afterthought as opposed to being built in. During battery product development, risk reduction can be achieved through many cost effective processes including Quality Assurance, stage gate criteria, Design Failure Mode and Effects Analysis, thorough reliability/ durability testing under various potential environments, excellent release and engineering processes, systems approaches between the chemical, electro-mechanical and software components, simultaneous engineering with manufacturing engineering, a problem reporting and tracking system, and complying with Underwriters Laboratory and appropriate standards from ISO and IEEE. Poor quality emanating from product development can result in very expensive fixes and delays, high warranty costs, loss of reputation, and the loss of customers and investors. It is much cheaper to find and fix a problem during development. All of the product development processes need complete management support, especially stage gate decisions for lasting solutions. Education and buy-in of leadership and investors are crucial to reducing product risk.

Transitioning to Data-Driven Quality As A Service (DDQaaS)

2pm-2:45pm

Presented by: Daniel Zrymiak, Westgate Technology

Area of Focus: Tools and Beacons

Session Level: Advanced

Legacy model of Quality as a Staff Function is limiting due to these disadvantages - Task-oriented (Steps and Tests Performed) - Time-boxed - Reactive, after-the-fact responses Shift to Data-Driven Quality As A Service mindset - Servant-leader and subject-expert for other functions - Data-driven orientation to organization, product, and project context - Outcomes oriented (Definition of Done) - Set prerequisites (Definition of Ready) Cost and budget changes - Shift funding to reflect steady state and peak states - Promote early-stage practices (i.e. Shift-Left in product development) when Quality intervention has lower costs. - Services can be automated, move to self-serve or on-demand models - Staff and fund according to data-driven demands Summary - Moving to a data-driven service model reduces overhead and fixed costs, and makes the operations more nimble.

Quality 4.0 Transformation: Leadership, Technology, and Data Science Synergy

2pm-2:45pm

Presented by: Michael Mladjenovic, Simplicity Advantage Inc.

Area of Focus: Transforming Leadership

Session Level: Advanced

Quality 4.0 is an approach that incorporates digital technology and data science to enable organizations to achieve business excellence. Quality professionals can lead their organizations to apply quality disciplines to new technologies. The presentation covers a roadmap integrating Quality Management principles, Digital Technology, and Data Science, creating a Quality 4.0 framework. Gain an understanding of the Digital Value Transformation Analysis™. •Understand Digital Transformation Framework using Reference Architecture Model Industry 4.0 (RAMI 4.0) •Recognize how to identify transformation opportunities and challenges using the Smart Industry Readiness Index (SIRI) •Learn how to build a comprehensive Quality 4.0 Transformation implementation plan.

9001 Portfolio on the Brink of Revision

2pm-2:45pm

Presented by: Robert Freeman, A Cube TIC & Denise Robitaille, Robitaille Associates

Area of Focus: Shaping Processes

Session Level: Intermediate

ISO 9001 is being revised for the first time in over a decade. Its supporting documents ISO 9000, 9002 and 9004 are also poised for revision. A lot has happened in the world in the last 5 years and a lot has happened in the standards community in the last six months. The pandemic changed how we work, how we communicate, how we interact and how we engage in commerce. The ISO community has been immersed in the conversations around climate change and social equity. And, risk has emerged as an overarching concept that spans these far-reaching issues. It is yet to be determined to what extent these changes and dynamics should impact the revisions of these documents. This presentation will provide an overview of all four standards. This will be followed by an open forum in light of the items noted above to discuss feedback, concerns and questions as we move forward with the next version of these flagship management system document.

Case Study



Case Study: Gage R&R on Robot Assisted 3D Measurement Equipment System

2pm-3pm

Presented by: WILLIAM FELTON, LOCKHEED MARTIN

Area of Focus: Shaping Processes

Session Level: Advanced

Do you have or are you considering a structured light 3D scanning system inspecting parts or assemblies? How accurate and precise is it? This is a case study on a measurement system analysis of a robotic assisted 3D scan measurement system used to validate aerospace tubes and ducts. This presentation is an example gage study of a semi-automated structured-light 3D scanner called Handyscan with reports in Polyworks.

Concurrent Sessions

Advanced Quality Auditing: Applying Risk Based Thinking to F2F & Remote Auditing, plus Data Analysis

3pm-3:45pm

Presented by: Lance Coleman, IDEX Health and Science, LLC

Area of Focus: Tools and Beacons

Session Level: Intermediate

Learn how to make your quality audit program an integral part of how your organization sustains positive results. How to develop an internal audit program from one that is backward facing, reactionary and solely compliance based to an advanced quality audit program that is forward seeking, risk managing, continuous improvement driving and improvements sustaining will be discussed. Best practices in supplier auditing such as risk based scheduling and follow-up, determining when to conduct onsite vs. remote audits, team optimization, and responding to budget constraints, will also be reviewed. Relevant tools, tips and templates will be shared.

The New IA9100 Aerospace Standard: Preparing for Takeoff

3pm-3:45pm

Presented by: Buddy Cressionnie, International Aerospace Quality Group & Alan Daniels, IAQG

Area of Focus: Shaping Processes

Session Level: Intermediate

The new quality management system (QMS) series of standards produced by Aviation, Space, and Defense (ASD) is nearing ballot. The IA9100-series of standards consists of IA9100 QMS, IA9110 QMS Maintenance, IA9120 QMS Distributors are replacing the existing AS9100-series standards. This session will highlight some new and innovative QMS concepts, include the IA9100 review process and revision changes that will drive QMS improvements in any industry, and the timeline for release of the new IA9100 concepts. The second area of discussion will include IAQG improvement standards and new Aerospace Improvement Maturity Model (AIMM) that is designed to help drive QMS improvement. AIMM is designed to help any organization improve as little as a single targeted process area to spanning across the entire QMS in order to more effectively meet product and service customer expectations, quality excellence and on-time delivery.



Process Focused Maturity: The Roadmap to Leveraging Advanced Analytics for Continuous Improvement

3pm-3:45pm

Presented by: Kade Brewster, Brewster Consulting Group

Area of Focus: Shaping Processes

Session Level: Intermediate

Data is one of the most important assets for a modern business. However, many organizations fail to take advantage of this critical business asset. For organizations to leverage their data to drive meaningful improvements, it's critical that they focus on their most critical processes at a granular level. At the micro level, an organization is made up of many processes that drive core businesses functions. Maturing those critical processes is one of the keys to unlocking the ability to transform into a data-driven organization. However, most organizations have no clue what steps to take to truly mature processes, build a hierarchal data environment, and mature into more advanced phases of analytics. They instead choose to get caught up with the latest buzzwords, like AI or Machine Learning, with no practical understanding of how those concepts can be applied. Learn about the Process Maturity Scale – a scale that combines best practices from Lean Six Sigma, Project Management, Data Engineering, Data Architecture, and Master Data Management to provide organizations with a roadmap for advancing the maturity of their most critical processes. This maturation will help unlock the pathway to leveraging advanced analytics and emerging technology in a way that will actually provide a positive ROI for an organization.



Exploring Leadership Dynamics in Quality Assurance Through the Collaborative Evaluation Model

3pm-3:45pm

Presented by: MICHAEL OSEI, Western Michigan University & LILIAN Rodríguez-Campos, University of South Florida

Area of Focus: Transforming Leadership

Session Level: Intermediate

This collaborative evaluation study examines the interplay between "leader-substitute" dynamics and "member-leader fit," enhancing quality leadership within organizations and teams in evaluation practice. The research investigates how informal leaders influence team performance and outcomes, while also assessing the alignment between leadership styles and team members' attributes. The conceptual basis for this study is the Rodriguez-Campos (2012) model for collaborative evaluation (MCE). Using MCE approach, this study draws on different evaluation approaches to provide a thorough understanding of leadership dynamics and their effects on team effectiveness. The findings contribute to enhancing leadership practices and team functioning, thereby promoting evidence-based decision-making, and fostering more productive work environments.

Navigating Difficult Dynamics: An Exclusive Session on Mastering Interactions in the Workplace

3pm-3:45pm

Presented by: Asia Bribiesca-Hedin, Bridgewell LLC Professional Services

Area of Focus: Transforming Leadership

Session Level: Intermediate

Have you ever felt mentally exhausted after a challenging interaction with a colleague? If difficult personalities feel like "spam" cluttering your mental inbox, you're not alone. Difficult people hijack our leadership effectiveness., and unchecked, they redirect our attention, our attitude, and our results. They're not going anywhere, so this interactive session is designed to deliver immediate strategies for dealing with difficult people without losing your job or your mind.

Innovate to Elevate: Harnessing AI and Emerging Technologies for Lasting Solutions

3pm-3:45pm

Presented by: Rhonda Farrell, Global Innovation Strategies

Area of Focus: Tools and Beacons

Session Level: Intermediate

"Innovate to Elevate" is a dynamic and thought-provoking presentation that explores the boundless possibilities of leveraging Artificial Intelligence (AI) and emerging technologies to propel us into a future defined by lasting solutions. In a world that's constantly evolving, the ability to harness the power of these innovations is not just an advantage—it's imperative. Join us on this journey as we delve into the transformative potential of AI and other groundbreaking innovative technologies. Discover how these tools can reshape industries, solve complex global challenges, and drive innovation to new heights. Key Takeaways: 1. Understand the Landscape of AI and Emerging Technologies: • Develop a comprehensive understanding of the current state of AI and emerging technologies and their real-world applications. • Gain insights into the potential and limitations of these technologies, along with their impact on various industries and sectors. • Learn to differentiate between various AI and emerging tech solutions and their suitability for specific use cases. 2. Harness Strategies for Effective Integration and Innovation: • Explore strategies and best practices for integrating AI and emerging technologies into business processes, products, and services. • Understand how to formulate an innovation strategy that harnesses these technologies to create lasting solutions, enhance efficiency, and drive growth. • Discover practical approaches for overcoming implementation challenges, including ethical considerations, data privacy, and cybersecurity. 3. Inspire and Lead Innovation in a Digital World: • Gain insights into the role of leadership in fostering a culture of innovation and adaptability in organizations. • Learn how to inspire and lead teams in leveraging AI and emerging technologies to solve complex challenges and drive positive change. • Discover strategies for staying informed about the evolving tech landscape and effectively guiding innovation initiatives in the digital age. Who Should Attend? • Business Leaders • Tech Enthusiasts • Policy Makers • Researchers and Academics • Startups • Students "Innovate to Elevate: Harnessing AI and Emerging Technologies for Lasting Solutions" is not just a presentation; it's a catalyst for change. It's an opportunity to discover how AI and emerging technologies can reshape industries, address global challenges, and create a brighter future for all.

Case Study

Achieving Sustained Improvements in Infection Rates Utilizing Process Confirmation

3:15pm-4:15pm

Presented by: Michael Waterman, Cleveland Clinic

Area of Focus: Shaping Processes

Session Level: Basic

Central Lines are used to deliver medications, treatment and draw specimens from hospital patients. Direct access to a patient's vascular system increases the chance for potentially dangerous blood infections. Using Standard Work and an associated Process Confirmation methodology in conjunction Daily Management boards with an integrated PDCA cycle, Cleveland Clinic has successfully achieved and maintained a 30% reduction in Central Line infections. This process is now being deployed in efforts to reduce other quality concerns such as pressure injuries and patient falls. In this session you will learn how they developed the standard work tool, deployed the process confirmation method to over 220 inpatient units, and created a tracking system to monitor performance and adherence to the process. Additionally, you will learn how they used statistical sampling to develop an ongoing audit system designed to monitor and maintain the preventative measures outlined in the standard work and signal when more intense process checks are required to maintain the achieved improvements.

Wednesday, May 15th

Case Study



The Case to Replace: How the C-Suite and Quality Leaders Can Fix their Tech Stack Together

8am-9am

Presented by: Tiffany Sepp & Nicholas Kalogeras, Vanguard Clinical

Area of Focus: Transforming Leadership

Session Level: Basic

The idea of "ripping and replacing" an existing eQMS with another can be intimidating for organizations of any size. However, the long-term costs of using an ill-suited system can far outweigh the short-term effort to put a more functional one in place. In this session, you will learn how leaders and members of a Quality team can diagnose issues with their existing QMS, build a case for replacement, advocate for their needs, develop a budget, and work with the C-suite to secure the technology that they deserve - all while minimizing disruption to existing quality workflows and saving costs in both the near and long term. The presenters will walk through their own experience with an eQMS that didn't suit their needs, how they came to realize it was not functioning the way it should, and how they worked together to build a compelling functional AND financial case to replace it with something that better served the Quality team and the company as a whole.

Concurrent Sessions

Good quality is good business - Building the business case for Quality Management

8:30am-9:15am

Presented by: Gerben de Haan, AlisQI

Area of Focus: Shaping Processes

Session Level: Basic

Many of us in the quality domain struggle to financially quantify our efforts and successes. Recent research shows that only a minority of the manufacturers deploy a Total Cost of Quality model to systematically quantify the financial impact of quality management. In this paper, we present a simple but effective approach to quantify the quality business function. With this methodology quality professionals can: 1. Assess where their spend on quality goes 2. Calculate the ROI of any quality related investment 3. Benchmark their quality business function with their peers.

Using Lean Six Sigma to Address Four Top Cost Saving Opportunities in the Clinical Laboratory

8:30am-9:15am

Presented by: Katie Benyo & Mirjam Wit, Accumen

Area of Focus: Tools and Beacons

Session Level: Basic

Lean is a management philosophy that focuses on creating value for customers while minimizing waste; Six Sigma is a methodology to eliminate defects and variability. They can be applied to many industries. Healthcare is a sector that encompasses services and products critical to improving health. Within healthcare, the clinical laboratory is where medical tests are performed on patient samples to aid in diagnosis and treatment. Lab services leverage 60-70% of critical decision-making such as admittance, discharge, and medication. Lean Six Sigma can be applied within the clinical laboratory. This presentation will give a brief overview of current laboratory industry challenges, then describe how lean Six Sigma can be used to address four top cost saving opportunities in lab. Most Six Sigma practitioners know that improvement projects can have significant financial savings. Some have even said that Six Sigma is primarily about profitability, and quality and efficiency are just byproducts. It is important to capitalize on cost savings in the lab, as there is significant cost pressure on hospitals today. Due to changes in healthcare, leadership is rethinking how the lab operates. An overview of reimbursement decline will be reviewed. Given these challenges, lab costs must be targeted by lean Six Sigma. Four top cost saving opportunities include the costs of lab testing, lab labor, lab equipment/supplies and reference testing, and blood products. In line with Lean's goals to create value for customers and minimize waste, and Six Sigma's goal of financial savings, these four areas of focus in lab benefit from applying these principles.

The 12 Building Blocks of Organizational Culture

8:30am-9:15am

Presented by: Grace Duffy, Management & Performance Systems

Area of Focus: Transforming Leadership

Session Level: Intermediate

Building and improving a culture of organizational excellence requires a systematic approach. This session shares the 12 Building Blocks of Organizational Culture developed over a period of 45 years through study and experience. The steps to a culture of organizational excellence begin with the individual, progress through alignment with organizational priority goals, and encompass the concepts of Lean Six Sigma, leadership, variation, data, and sustainability. A key theme of the model is Mindfulness. This valuable human skill – of full and non-judgmental awareness of one's present state – is proving its benefits in countless areas in our lives. Mindfulness is the awareness that emerges through paying attention on purpose, in the present moment, and non-judgmentally to the unfolding of experience moment by moment. A robust model is required to achieve and sustain performance goals. Organizations must assess the maturity of their processes and organizational readiness to implement such a methodology before embarking on the journey. An organization should be at least at level 3, Defined Systems Approach, of the Maturity Model to reap the rewards of a culture of excellence. Management Systems require not only integrated processes, but a human-centered approach that creates an engaging workplace. Quality professionals are a valuable resource to align measurable processes to strategic goals that establish and sustain an effective organizational culture. Join with other session participants to discuss the value of the empowered individual to a high performing organization. Share examples related to the 12 Building Blocks for improving organizational culture through planning and effective leadership.



Effective Failure Mode Avoidance through digitalization

8:30am-9:15am

Presented by: Preetam Merchant & Asmita Ghate, Tata Motors Limited

Area of Focus: Shaping Processes

Session Level: Advanced

A Failure Mode Avoidance (FMA) process is a pragmatic and systematic approach to identifying and eliminating potential failure modes in new products early in the design process. Although FMA is mostly used in product development, it has significant benefits when used throughout the project lifecycle. In this paper, the authors discuss digitisation architecture and benefits of three processes viz. 1. design/process issue tracking system 2. FMEA process 3. Field issue management system. The digitization of FMEA process aligned with design/process issue tracking system can help reduce risk by ensuring systematic implementation of recommended actions. Issue tracking system can further capture additional improvement opportunities generated during digital and physical validation. Field issue management process digitisation can lead to efficient occurrence prevention. Involvement of cross functional team including product/process design, testing, project champion and quality is essential for efficient deployment of process digitisation. Appropriate handshake between these digitized systems, directs to building learning library. This learning library can be used to implement design and process poka yoke, further leading to effective FMA process.

Defining Leadership Competence for the Modern Quality Professional

8:30am-9:15am

Presented by: Mike Turner, CQI

Area of Focus: Transforming Leadership

Session Level: Intermediate

The world where professionals ply their trade is changing so rapidly that continuous professional development has never been as important. The rapid rise in influence of digital technologies, disruptions to supply chains and the imperatives encapsulated in the UN Sustainable Development Goals are growing urgencies for all disciplines. This will require fresh innovative action and intimate knowledge of how to balance risk and opportunity. Professionals that embrace this concoction of challenges will lead the way in the next 10 years. The need for effective leadership has never been so important for quality professionals. Having influence over responses to these disrupting factors will require them to acquire and develop some new skills, knowledge and behaviours. This is especially challenging in a world that still exhibits some misunderstandings and misconceptions as to what quality people do and can contribute. The UK Chartered Quality Institute (CQI) joins the ASQ and other national quality professional bodies in the mission to champion quality management for the benefit of society. At the core of what these bodies do is clarity about what constitutes professional competence, now and for the future. The CQI contributed to this intent when it published its Competency Framework in 2014. However, feedback from members indicated that this simple summary of “what good looks like” was no longer sufficient to meet the challenges listed above. In summer 2021, the CQI decided to embark on a project to develop a more practical tool for competence development. This 9-month programme of research comprised four key stages :- • Literature review, • Benchmarking and comparative analysis • Initial design involving extensive consultation, workshops and focus group discussions • Four progressive stages of testing The resulting framework describes a comprehensive set of skills, knowledge and behaviours required of a modern quality professional. These competences are graduated to support progressive professional development. The definition of leadership competence has been considerably expanded, providing a comprehensive set of behaviours that can be built into a progressive personal development programme. The framework will also provide people working in non-quality roles with a list of competences that would make them more effective in their roles. It will also communicate the nature of the work of the quality professional, and the potential value that they can add.

Achieving Near-Zero Defects with Failure Modes and Effects Analysis (FMEA)

8:30am-9:15am

Presented by: Denis Devos, Devos Associates

Area of Focus: Tools and Beacons

Session Level: Basic

FMEA is the primary tool used for predictive analysis in the Automotive Industry and a variety of others for both product designs' suitability to meet design intent, and a manufacturing process' suitability to achieve levels of zero defects (Note that this is not just for an automotive-industry audience) This presentation will provide a very basic introduction to Failure Modes and Effects Analysis (FMEA). An overview of Design FMEA and Process FMEA will be discussed, with a deeper treatment of manufacturing process FMEA. Participants will learn how to start with the functions of a manufacturing process step and how to associate failure modes with the functions and requirements. Failure modes are examined to determine their effects on customers and other stakeholders, and then assessed in terms of their impact and prioritized for risk reduction. FMEA uses 3-dimensions of risk: the Severity of the failure if it happens, the Probability of Occurrence of the failure, and the effectiveness of Detection measures that will detect the failure if it occurs. The instructor will guide participants through an example FMEA format used in the automotive industry. Knowledge of FMEA is not required for this presentation.

Case Study



Quality Pulse Check: An Online Tool for Improving the Compliance Process

9:15am-10:15am

Presented by: Eileen Gee, WSP USA

Area of Focus: Shaping Processes

Session Level: Intermediate

To increase the chance of success with any initiative and improve organizational performance, we must be proactive, plan ahead, engage, and lead by example. In order to promote healthy, sustainable growth within an organization, we need to monitor and control our progress towards achieving certain goals. We must:

- Map out processes.
- Identify inefficiencies.
- Create a solution to improve the processes.
- Monitor and control with lessons learned.
- Foster a quality mindset to add value along the way.

In this presentation, we will share how one can cultivate a quality mindset to help an organization succeed by creating and utilizing a customizable online tool and seeking ways to eliminate the repetition of data mining efforts. This online business intelligence tool includes the ability to analyze large amounts of information into streamlined, concise illustration of pertinent data. For continual improvement, this tool gives multi-level leadership team real-time insight into the compliance status of the organization's required project delivery and quality procedures.

Concurrent Sessions

Creating a Corporate Model for Quality Management System Assessment and Improvement

9:30am-10:15am

Presented by: ELINALDO ARAUJO, NIDEC ACIM

Area of Focus: Shaping Processes

Session Level: Intermediate

Allocating resources and time to establish and maintain a quality management system (QMS) constitutes a significant asset for a company. Literature contains numerous references regarding a QMS scope. Some are more specific and prescriptive, while others are more general, high-level, or flexible models. Maintaining a QMS certificate of compliance with the requirements of the ISO-9001 standard is a widely used good practice. However, even meeting the requirements of a standard such as ISO-9001, some crucial questions remain valid: Is this QMS cost effective? What is the return on that investment? Which one performs best among the different business units of a corporation? For this reason, we devised a comprehensive assessment method that seeks to answer these questions and simultaneously pinpoint opportunities for improving the QMS effectiveness of each business unit. We have identified the key aspects of a QMS that aims to minimize the total costs of poor quality and thereby amplify the return on the system investment. The basic elements of the evaluation method are presented, together with the road-map for evaluation and improvement of the QMS of several business units.

No Phone for 11 Days! Are You Kidding Me? A Lean Six Sigma Case Study

9:30am-10:15am

Presented by: Jamison Kovach, University of Houston

Area of Focus: Shaping Processes

Session Level: Basic

No Phone for 11 Days! Are You Kidding Me? This is the family-friendly version of what customers likely remarked in summer 2022 when they took their phones in for repair at one company's stores. Phones purchased from this company can be taken back to one of their stores for repair, but most have to be sent away for repair. In addition, the repair process is a lower priority for store employees compared to the sale of new devices. This presentation will provide a detailed account of all the tools/methods used in this Lean Six Sigma project to reduce the repair process cycle time for in-store activities. Attendees from all industries can use what they learn from this case study to guide their future process improvement efforts.

Integrating Green and Sustainability Principles into Value Stream Mapping

9:30am-10:15am

Presented by: Elizabeth Cudney, Maryville University & Chad Laux, Purdue University

Area of Focus: Shaping Processes

Session Level: Intermediate

Value stream mapping is a lean technique that enables organizations to visualize the flow of materials and information. The methodology involves developing a current and a future state value stream map. The current state value stream map is a valuable tool for understanding and documenting an end-to-end process to obtain a performance baseline. The future state value stream map enables process improvement teams to identify the ideal flow of materials and information. Value stream mapping focuses on identifying and eliminating waste within a process. Current lean wastes include transportation, inventory, motion, waiting, overproduction, over-processing, and defects. Organizations often include an eighth waste of not utilizing employees' skills and creativity. With regard to the environment and sustainability, organizations can use value stream mapping to understand the environmental waste throughout a product life cycle to guide an organized approach to achieve sustainable circular production. As organizations strive to become more sustainable and environmentally sound, it is also essential to identify wastes associated with the environment and evaluate the value stream accordingly. Value stream mapping enables an environmental approach to support business improvement through enhanced value. This presentation will provide an integrated approach to value stream mapping to document flow and identify waste associated with Green and Sustainability concepts. Further, the presentation will include examples from healthcare, agriculture, and higher education that demonstrate how to integrate Lean and Sustainability principles and make a difference in reducing waste and inefficiencies and supporting the environment.

Federal Agency's Journey Integrating Quality, Performance Measurement, Dashboarding, and CPI

9:30am-10:15am

Presented by: Marc Berson, LMI

Area of Focus: Tools and Beacons

Session Level: Basic

This is a story about a Federal Agency that is firmly committed to its mission of providing high-quality technology to its customers in the most expeditious way possible. This Agency has long believed that the way to meet this commitment is by developing a quality-oriented culture amongst its diverse staff and by reinforcing its promise by establishing as one of its strategic goals the pursuit of organizational excellence. The Agency has embarked on this aggressive journey toward excellence by intentionally integrating three key disciplines - quality management, performance measurement, and continuous performance improvement. This session will dive into the details of this journey to describe how this agency built out its quality management program across its entire enterprise (including governance, quality assurance audits, training, etc.). This session will also elaborate on the performance measurement initiative beginning with the development of a comprehensive inventory of metrics that would represent the work performed in a dozen different functional areas. The session will further describe how we prioritized the visualization of key metrics into interactive dashboards that program personnel and agency leaders use weekly to efficiently and effectively manage its resources and identify opportunities for improvement. The dashboards have not only enhanced transparency by making meaningful information readily accessible, but have also enabled staff to become more engaged with the data and more involved with finding ways to do things better. The data also provides key evidence which demonstrates the value that the Agency offers to its stakeholders. This session will show a variety of views from the dashboard that illustrate its effectiveness and the capability to drill down into greater levels of detail to accommodate the unique needs of the user. Essentially, the dashboards are helping us measure and monitor what matters most. This session will also cover how the performance metric results and trends displayed in the dashboard are helping program leaders identify areas that may be improved. Program personnel now have the capability to work with Lean Six Sigma and BPR experts to help with continuous performance improvement initiatives following the analysis available through the dashboards. This also means the improvement efforts are focused on the highest priority improvements that are expected to yield the most attractive returns on investment.

Leadership Development: A Key Strategic Initiative for Success

9:30am-10:15am

Presented by: Jill Marie Larkin & Kristine Wolff, DNP, RN, NEA-BC, V.P. Cadence Clinical Services, Ovation Healthcare

Area of Focus: Transforming Leadership

Session Level: Basic

Organizations are struggling with hiring and keeping employees including leaders along with shrinking profit margins. For healthcare organizations, the lack of leadership development has been magnified by the pandemic and inability of the organizations to easily recover. Leaning on leaders to drive operational, quality, and financial performance with lack of leadership experience is adding stress on an already stressed system. Often leadership development is seen a luxury and can be cut from the budget to save money. The contrary is true. Leadership development is a key strategy every organization should employ to be successful today and in the future. Although some similarities exist among organizations and leaders. The best approach is to incorporate individualize long-term and short-term leadership development initiatives into your strategic plan. Plan to attend to develop your personal leadership development strategic plan and also pack up some ideas to take back with you to begin an organizational strategic plan.

Score your Resilience to Design a Robust Supply Chain

9:30am-10:15am

Presented by: Russell Snyder, Intel - Retired

Area of Focus: Shaping Processes

Session Level: Intermediate

I worked in the semiconductor supply chain for 23 years. The only certainty was that both supply and demand were uncertain. Risks were never fully understood no matter how in depth the qualification was or the risk audit was. Even before the pandemic we faced some dramatic supply/demand mismatches. Some involved not understanding the customer and some involved not understanding supply flexibility and the constraints that limit it. In many of the situations we found ourselves in we used knowledge workers with masters degrees to meet daily with suppliers to push them to ship us more parts. This was a totally reactive approach to supply chain management with highly educated employees. By starting your supply chain design with business continuity risks understood, as much as possible, we can design a more resilient supply network to mitigate those known risks and possibilities that can derail the financial stability of the enterprise. Understanding business continuity risks, given certain disruptions, can allow us to understand the resilience of the "As is" supply value chain and design the "to be" to withstand some uncertainty.

- New Voice to ASQ!

