



Sustaining Improvement

Monday, February 27

Concurrent Sessions

The Key to Sustainable Improvement in Lean Organizations: More Leadership from More People

10:15am-11am

Presented by: David Fetterman, Elevance Health

Area of Focus: Lean, Six Sigma and Leadership **Session Level:** Intermediate

Sustaining improvement requires more than process change - it requires everyone in the organization to adopt a Lean mindset of continuous improvement. Traditionally, leading this "people side of change" has been the responsibility of managers. But in today's session, we'll separate leadership from management, and we'll explore the benefits to organizations of "more leadership from more people." We'll also discuss the role of the quality professional in providing leadership from both a people and process perspective. And we'll focus on practical ways you can implement this leadership paradigm - how you can lead from wherever you are in the organization and encourage others to lead.

Practical Principles for Test Planning and Sampling

10:15am-11am

Presented by: Nathan Soderborg, Exponent & Thomas Brown, Exponent

Area of Focus: Lean and Six Sigma Essentials **Session Level:** Intermediate

In our time practicing Six Sigma and quality consulting, one of the most common questions we get asked is "How many samples do I need for my study?" Across various industries and contexts, we have seen rules of thumb presented for different situations. But, of course, the right answer is, "It depends..." Factors such as the purpose of the investigation, accessibility of samples, resources required, and desired precision of results all need to be considered. As advisors to those seeking help with developing a strategy for sampling and testing, our job is to ask the right questions to guide creation of an approach that is both practical and useful.

This presentation reviews different approaches to testing, including "pass/fail," "test-to-failure," and "degradation tracking." It presents questions that should be considered in planning tests and explains the different levels of information content that can be obtained from each approach. In addition, the presentation outlines basic methods for determining sample size, examines pros and cons related to sample size for each approach, and discusses common strategies for reducing sample size while still achieving desired confidence levels in results. Concepts will be illustrated using real-world examples and application of Minitab and JMP software.

Schedule as of February 14, 2023.
Subject to change.



Learn more and register at
<https://asq.org/conferences/six-sigma/registration>



Incorporating Lean Six Sigma into Everyday Work

10:15am-11am

Presented by: Rick Hefner, Caltech

Area of Focus: Lean, Six Sigma and Leadership **Session Level:** Intermediate

Lean Six Sigma (LSS) has proven to be a powerful enabler for quality improvement but it is viewed as separate from everyday work. Companies conduct a series of LSS projects, but fail to incorporate LSS tools and methods into everyday work. As a result, LSS does not permeate the culture and may be dropped during budget cuts. This presentation will identify Lean Six Sigma tools and methods that can benefit everyday work. Examples will be presented in product development and project management. Attendees will leave with an appreciation for how to move beyond a series of LSS projects to a full LSS-enabled culture.

Was Deming Right to Reduce Variation by Using a Single Supplier

10:15am-11am

Presented by: Russ Snyder, Intel & Hemal Shah, Intel

Area of Focus: Supply Chain Strategies **Session Level:** Advanced

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

Lean Six Sigma at GPS - A Real Case Study in Capacity and Demand

11:15am-12pm

Presented by: Dodd Starbird, Implementation Partners LLC

Area of Focus: Lean and Six Sigma Essentials **Session Level:** Intermediate

Once upon a time... the Group Proposal Services department (GPS) at a financial services company decided to take a Lean Six Sigma approach to assess their process efficiencies, particularly with the intention of deploying team performance measures and standards for their work. In the prior year's "busy season", the team had experienced some significant backlog and a drop in their service levels, attributed by leaders at the time to the fact that volumes had exceeded their capacity. They wanted to ensure that the next year turned out better. Their project was wildly successful. The team found opportunities to improve both processes and teamwork by intentionally designing processes, teams, and measures that fit together. Many businesses today have the same challenge that the GPS team did: they can't keep up with their workload. A pandemic, a labor shortage, a Great Resignation, and a little bit of global instability have conspired to erode service levels for the businesses we all know and trust. In this case study session, participants will assess the GPS team's story and see if they can figure out how the team improved its process and performance!

Schedule as of February 14, 2023.
Subject to change.



Learn more and register at
<https://asq.org/conferences/six-sigma/registration>



Gain Before Sustain: Learning Strategies for Lean Leaders

11:15am-12pm

Presented by: Richard Uphoff, The Vanguard Group

Area of Focus: Lean and Six Sigma Essentials **Session Level:** Intermediate

Learning is a cornerstone of Lean. For example, one key component of Coaching Kata is to reflect on the last action taken. This act of reflection is an act of learning. Cultural commentators and workplace experts also stress that learning is a critical measure of success in today's competitive marketplace. However, very few people explain HOW to learn. This presentation will review strategies for Lean Leaders on how to learn better and faster. We will discuss some myths and strategies in the learning process and attendees will leave with an action plan to develop their own learning.

Leader Standard Work: Behaviors to Build Sustainability

11:15am-12pm

Presented by: Marthajane Vincent, State of Arizona Government Transformation Office

Area of Focus: Lean, Six Sigma and Leadership **Session Level:** Intermediate

In this session, attendees will have the opportunity to explore the fundamental concept of Leader Standard Work and how it has been applied within the State of Arizona. Leader Standard Work is a documented set of behaviors and recurring activities that advance a continuous improvement culture. By practicing these behaviors, leaders create teachable moments, identify opportunities to improve processes and maintain a high performance culture. Whether you are a Leader or a Lean Coach, this workshop will deepen your understanding of this fundamental tool for sustainment and give you new insight for taking the concept to the next level for your organization.

No Guarantee with Know-How

11:15am-12pm

Presented by: Cynthia Young, CJ Young Consulting, LLC

Area of Focus: Lean, Six Sigma and Leadership **Session Level:** Basic

Are you frustrated with teams that you believe could deploy Six Sigma, but even with the know-how of Six Sigma, miss the mark on the project deployment? In this interactive session, attendees will have an opportunity to discover options to integrate teammates who don't have the Six Sigma know-how to make a positive impact on your project deployment. Attendees will leave the session feeling confident about different areas of know-how to integrate into their Six Sigma deployment teams.



Introduction to Lean Thinking - An Engaging Simulation

3pm-3:45pm

Presented by: Patrice Griffith, UT Soutwestern Medical Center

Area of Focus: Lean and Six Sigma Essentials **Session Level:** Intermediate

A "how to do it" of a highly participative simulation provides an introduction to lean methodology and terminology basics with minimal props and materials. in this session, I will describe how to incorporate the interactive simulation into any day long lean training. The simulation is integrated with a didactic discussion and provides the learner with a practical knowledge of lean concepts and tools including waste reduction, visual management, takt time, one piece flow, and error proofing. Participants of this session will be able to incorporate the simulation into their organization's basic lean training to enhance participation and understanding in a fun and engaging way.

Enhance your continuous improvement work with App-based project management software; Part 2 "The rest of the story"

3pm-3:45pm

Presented by: Chad Smith, Continuous Improvement Solutions, LLC

Area of Focus: Lean, Six Sigma Essentials **Session Level:** Intermediate

Organizations are continuing to explore new avenues and stretch their application of continuous improvement. In 2022, we reviewed the work of Air Hygiene International as they decided to enhance their continuous improvement work by implementing an app-based project management software. Well, news travels fast. After adopting and implementing the software and process in their construction services and instrumentation functions, finance became super interested. This lead to finance learning about the tool and the construction services/instrumentation functions teaching the tool to the finance team. Finance now is currently expanding the use of the tool to support and automate their contracting and billing functions.

In this presentation, we'll catch up the folks that missed the presentation in 2022, as well as tell the rest of the story of further deepening of application across 2022 into 2023.

Mahalanobis Taguchi System for Operational Strategies

3pm-3:45pm

Presented by: Rajalingam Ramakrishnan, Wipro Limited

Area of Focus: LSSC Masters **Session Level:** Intermediate

MTS - Mahalanobis Taguchi System is used to optimize Diagnosis and Pattern recognition systems. It helps to deal with a large volume of features and data in order to develop a robust pattern recognition system. This method uses a combination of Taguchi techniques, Mahalanobis distance and robust engineering concepts. This paper discusses how we used Mahalanobis Taguchi System to strategize our objectives in achieving higher Customer Satisfaction, Productivity and Effort adherence



Effective Use of Screening Experiments - Some Practical Experiences

3pm-3:45pm

Presented by: Steven Bailey, Steven P Bailey, LLC & Ron Snee, Snee Associates, LLC

Area of Focus: Lean and Six Sigma Essentials **Session Level:** Intermediate

When faced with a problem to be solved by running designed experiments we should first think of what strategy should be used for the experimentation. One aspect of successful experimental strategy that seems to be overlooked is how to use screening experiments in practice. In this article the authors share their combined experiences of more than 90 years in using designed experiments in which screening experiments are an integral part of the strategy. Along the way the benefits of running screening experiments and why they work is discussed. Topics such as the Pareto principle applied to experimentation and the robustness of screening designs to assumptions are addressed. Case studies, tips and traps and guidelines are provided. What emerges is a holistic approach to experimentation that results in practicing scientists and engineers getting the right data in the right amount at the right time.

Using a Tiger Team approach to deliver DMAIC results

4pm-4:45pm

Presented by: Michael McCarthy, Lincoln Financial Group & Michael Nichols, Lincoln Financial Group

Area of Focus: Lean, Six Sigma and Leadership **Session Level:** Intermediate

The current business environment requires Lean Six Sigma practitioners to deliver the high quality, thorough solutions to complex problems that have always been the calling card of this group, however now these solutions are demanded at an ever-quickenning pace. How can we maintain the structure and discipline of the DMAIC approach to process improvement but compress the timeframe to meet these demands? The solution Lincoln Financial has turned to is the Tiger Team. We have taken the fundamentals of the define, measure, analyze, and improve phases and compressed them into 30 calendar days. During this session we will walk through all of the key requirements in order for this approach to be effective including from the people side: a small group of resources composed of business SMEs, IA/IT support, Continuous Improvement professionals, and strong leadership committed to holding the team responsible as well as removing roadblocks. From a structure standpoint we will discuss the systems we have established to ensure success including communications that keep all parties informed at all times without being administratively burdensome, how we leverage specific resources at key phases of the engagement, as well as benefits and lessons learned along the way.



Improving Warehouse Operations Using Lean Practices 4pm-4:45pm

Presented by: Jamison Kovach, University of Houston

Area of Focus: Lean and Six Sigma Essentials **Session Level:** Basic

The warehouse where this improvement project was conducted provides repair services and storage for the equipment, supplies/consumables, and repair parts needed to perform technical cleaning and hygiene services for their clients such as in schools, hospitals, airports, etc. While initially trying to organize materials in the warehouse one section/area at a time using the 5S approach, we faced challenges that included space limitations of the existing layout, complexity due to the co-location of repair and storage operations, inability to temporarily shut-down operations to organize materials, and warehouse management's resistance to disposing of unneeded items.

To resolve the space/layout issues, executive management made a significant investment in renovating the warehouse. To organize and streamline operations, we developed a new space utilization plan that organized items into separate zones for storage and located space to perform repairs and all repair parts stored together in the same zone. In addition, by mapping the processes used in the warehouse for repair services and material storage we were able to improve efficiency by redistributing tasks and mitigate issues with the new inventory management system being implemented by identifying configuration changes that helped the software better meet the needs of warehouse operations and its personnel.

How to sustain and validate improvement by the use of an Economics of Quality Model

4pm-4:45pm

Presented by: William Ireland, Ireland Consulting

Area of Focus: Supply Chain Strategies **Session Level:** Advanced

The term "Economics of Quality" is fundamental to an effective Cost of Quality approach for any product life cycle phase. The Economics of Quality Management, EoQM technique is applicable to any industry. This paper will demonstrate the application for improved outcomes in defense contracting and will deploy a Data Item Description that creates a contracting structure to plan, analyze, report and assess a program's quality improvement. Applying an analytic costing methodology known as Cost-of-Quality (CoQ) derives from three key categories of costing: Prevention, Appraisal and Failure (PAF). This allows for the development of quality targets and activities to manage inherent reliability or in the larger sense a product's quality and quality improvement strategy. There is a representation of a contract vehicle known as a Contract Data Requirements List with an associated Data Item Description to incorporate guidance as a means for the government to monitor continuous improvement and realization associated with most quality management systems standards e.g. AS9100D. The methodology includes sufficient authorities and supporting tasking to enable quality assessment. A software-cyber



CoQ structure example is mapped to cyber activities to elements of the PAF model. This could be adopted to any framework such as agile.

Creating a High Impact Continuous Improvement Program 4pm-4:45pm

Presented by: Vic Nanda, NOKIA

Area of Focus: Lean, Six Sigma and Leadership **Session Level:** Intermediate

There are two essential characteristics of an effective continuous improvement (CI) program - first, that it is continual and embedded in the organization's DNA, and second that it uses structured CI methods. Over time an organization experiences changes that can potentially cause the CI program to wither away - leadership churn, changes in strategic priorities, competitive challenges, and workforce turnover, to name a few. In the face of these changes, there are two key factors that determine if an organization is able to effectively sustain its CI program: a strong culture of quality, and a robust workforce capability development program. This presentation will describe essential pillars of a CI program, and prerequisites for its success. It will define culture of quality with a specific set of attributes that an organization must focus on, measure, and strengthen if it wants to grow a culture of quality. By focusing on culture of quality drivers, an organization can ensure consistency in how it communicates, measures and improves its culture of quality. This presentation will also cover frameworks for scaling workforce capabilities - both skill-based and role-based, and strategies for scaling business impact of CI.

Tuesday, February 28

Concurrent Sessions

Applying Taguchi's Methods for Designed Experiments

10:15am-11am

Presented by: Scott Sterbenz, Ford Motor Company

Area of Focus: LSSC Masters **Session Level:** Advanced

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

Schedule as of February 14, 2023.
Subject to change.



Learn more and register at
<https://asq.org/conferences/six-sigma/registration>



A Novel Multidisciplinary Approach to Impact Cultural Transformation in Healthcare

10:15am-11am

Presented by: Dr. Katja Lehmann, BD

Area of Focus: Lean, Six Sigma and Leadership **Session Level:** Intermediate

When was the last time you visited a hospital Emergency Department? Was your experience positive or were you frustrated with endlessly waiting for healthcare workers to pay attention to your needs and treat your symptoms? If you experienced the later, you are not alone. A literature review conducted in 2018 and published in the Journal of Patient Experience (Vol 5.2, 101-106) about patient experience in ED's cited staff-patient communication as the most common frustration, followed by ED Wait Times. But what are the underlying root causes of these symptoms? Using the Bloodstream Infection diagnostic pathway as example, this presentation will showcase the existing silos between the emergency department/hospital floor and the laboratory and the consequences the lack of a common goal between these departments has on the patient journey. You will learn about a systematic method to tackle this issue and create alignment and focus for your organization.

Measuring the Seemingly Immeasurable

10:15am-11am

Presented by: Tony Belilovskiy, C3Exellence, LLC

Area of Focus: Lean and Six Sigma Essentials **Session Level:** Intermediate

The more important something is, the more we want to measure it. The better we measure it, the more we understand. It is a curious fact that many of the most important business and customer priorities often go unmeasured. Many leaders struggle to answer a key question: How can we use measures to connect enterprise performance, customer satisfaction and knowledge work to drive improvement? Strategic and business plans commonly include measures of success, but few of them are directly relevant to knowledge work or to what customers care about. The last thing we need is to inadvertently communicate to our customers that we aren't on the same page with them. This presentation shows you how to fix this mismatch. This presentation is for anyone working to establish strategic KPIs, develop a balanced scorecard, design satisfaction surveys, translate subjective customer priorities into product or process design criteria to drive outstanding performance.



Addressing the Supply Chain Crisis with Digital Tools

10:15am-11am

Presented by: Cheryl Pammer, Minitab

Area of Focus: Supply Chain Strategies

Session Level: Intermediate

It is clear that supply chain disruptions are widespread, long-lasting and continue to have a significant impact on how we do business. In this presentation you will learn specific strategies and tools that you can immediately use to identify and address the supply chain issues within your organization. You will see how some common lean/six sigma tools such as visualizations, value stream maps, quality improvement tools and predictive analytics have been successfully used to address the supply chain conundrum and will walk away knowing how to implement these tools upon your return to the office.

Design of Experiments and Continuous Improvement for Large Additive F-16 Fighter Cockpit Simulators

11:15am-12pm

Presented by: Christopher Colaw, Lockheed Martin

Area of Focus: Lean and Six Sigma Essentials

Session Level: Basic

Additive Manufacturing of large structures can present a real affordability and lead time opportunity over the traditional metallic approach, however requires greater upfront planning and process controls to be successful. This session will introduce the concept of Additive Manufacturing, the challenges associated with printing large parts, and the required considerations for process control, continuous improvement, design of experiments, and expectations for quality.

How the State of Arizona Achieves Lasting Change through the Arizona Management System

11:15am-12pm

Presented by: Travis Done, State of Arizona

Area of Focus: Lean, Six Sigma and Leadership

Session Level: Intermediate

We've been saying this for years: Government should run like a business, but how does this work in reality? In Arizona, we've developed and evolved our Lean Management System, called the Arizona Management System, into a proven method of taking strategy and turning it into results. This session will briefly cover the eleven elements included in the Arizona Management System (AMS); from strategic planning, scorecards and business reviews, to structured problem solving and visual performance management. We'll also dive into the AMS assessment; an innovative, simplified self-assessment that provides insight into the application of each element of AMS so that agency leaders and agency teams can better understand where their strengths & weaknesses are and where they should focus their improvement efforts.



Inpatient to Inpatient Transfer Process Optimization 11:15am-12pm

Presented by: Emily Colaianni, Ohio State University Wexner Medical Center & Arianna Galligher, Ohio State University Wexner Medical Center

Area of Focus: Lean and Six Sigma Essentials **Session Level:** Basic

Historically, there has been no standard process for transfer of care for a patient from one inpatient unit to another within our hospital. There is no current hospital wide target metric for this process either. This can result in lengthy boarding times, patients waiting to progress their level of care and patients waiting to get out of the OR, essentially stalling patient throughput. Additionally, lack of a metric and a process has led to confusion and frustration amongst staff contributing to dissatisfaction and lack of accountability. The goal was to use formal process improvement methods to create a transfer process pathway to decrease inpatient to inpatient transfer times from an average base time of 2hr and 10min to an average of 1hr 30min or less. By addressing this issue, we can decrease delays and improve patient throughput as well as staff engagement and satisfaction.

Machine Learning to Improve Lean Six Sigma Training Efficacy 11:15am-12pm

Presented by: Alexander Hathaway, MoreSteam

Area of Focus: LSSC Masters **Session Level:** Basic

Lean Six Sigma is the process of training an organization to use the tools of Lean Six Sigma to see, understand, and continually improve the processes of the organization. Yet we, as practitioners and instructors, often fail to apply those same principles and critical review to our own Lean Six Sigma training processes. If we intend to teach continuous improvement, then we must also continually improve the way we teach. We have to think creatively about new approaches to training, driven by data on our current performance. New ideas and creativity come from the combination of ideas and approaches from different domains. We drew inspiration from the field of machine learning. While terminology and technical skills may differ, there is a significant overlap between Lean Six Sigma and machine learning. In this presentation, we will highlight the similarities between the traditional DMAIC roadmap and the machine learning workflow using eLearning and student success as a case study. The case study outlines work to build a model for predicting student success in the end-of-course exam in a Green Belt eLearning course. The result is based on aggregated data measuring various types of interaction with the learning process collected from many users.



Leader Starter Kata: Rapid Initiation of Toyota Kata

1:30pm-2:15pm

Presented by: Hank Czarnecki, Auburn University/MEP & Bill Kraus, Arkansas Manufacturing Solutions

Area of Focus: Lean, Six Sigma and Leadership **Session Level:** Intermediate

Transformation is fundamentally about cultural change and thus underscores the vital importance of the leader in effecting good change within an organization. However, we must first create an environment that provides leaders an opportunity to consider a better way and for leaders to do all they can to enable team members to add value. It is up to the Leader to take the first step to overcome entropy and establish positive cultural momentum by involving everyone on the team in pursuit of a better way. So, in the context of a Continuous Improvement Transformational Journey, it stands to reason that the designated Leader is of vital importance. The primary value behind the Leader Starter Kata program centers on the fact that it helps the Leader think through what action one needs to take, in order to achieve the desired results, rather than depending on an outside resource, to tell that Leader what he/she should do. Utilizing Toyota Kata's "self discovery" approach, the Leader determines what NEEDS to be done rather than anyone else stating what SHOULD be done. In this manner, the Leader Starter Kata focuses on the essential importance of the Leader's ongoing opinion in guiding a Transformational Journey.

The Power of Play: Using Games in Six Sigma Teams

1:30pm-2:15pm

Presented by: Zac Jarrard, Jarrard Consulting, LLC

Area of Focus: Lean and Six Sigma Essentials **Session Level:** Basic

The power of play and games is real and has created a multi-billion-dollar industry. Even Fortune 500 companies are embracing the power of games. They are a transformational tool that can be leveraged in a practical way to affect change, increase value, and drive organizations toward sustained progress. This session will examine games and how they can be applied in the workplace, learn about several Six Sigma games for education and training, and share some lessons learned from using games at work.



Six Sigma 4.0 for Disruptive Information Technology Sector 1:30pm-2:15pm

Presented by: Rajalingam Ramakrishnan, Wipro Limited

Area of Focus: Lean, Six Sigma and Leadership **Session Level:** Intermediate

Six Sigma and Total Quality Management are the critical success factors for many successful organizations and industries. It has been the torch bearer for innovation and technology. As we become more and more dependent on Artificial Intelligence and advanced technologies, many of our industries require a complete revamp in the profound beliefs so that they are digital ready. This often requires a change in the platform they operate, which cannot be done without process perfection. Automation without process perfection can lead to disasters. Many of the digital transformation experts often overlook the capabilities of process improvement strategies and many times leading to failed start and sometimes resulting in expensive damages. Six Sigma 4.0 is a digital strategy to guide transformational initiatives by ensuring right tenets to support digital techniques. We piloted Six Sigma 4.0 - a digital strategy for process improvement with a set of niche analytical techniques supported by standard digital platforms. This paper presentation discusses on pitfalls of conventional Six Sigma concepts in current scenario, why it is necessary to relook at it and how to ensure digital transformation is well supported by the tenets of Six Sigma 4.0.

Assessing the Maturity of Your Operational Excellence System 1:30pm-2:15pm

Presented by: William Hathaway, MoreSteam

Area of Focus: Lean, Six Sigma and Leadership **Session Level:** Intermediate

Lean and Six Sigma initiatives focus on driving end-to-end improvement. But, are we eating our own cooking? How are we improving the system we use to realize improvements? How do we measure the maturity of our continuous improvement system? In this session, we will examine research that produced a quantitative framework to assess current process improvement practices. In examining the various weighted inputs that factored more heavily on success, we will then take it one level deeper and guide what concrete actions can be taken to improve gaps identified in the performance of the process improvement system.



Applying Soft Statistics in Non-Manufacturing Lean Six Sigma Projects

2:30pm-3:15pm

Presented by: Milton Krivokuca, California State University Dominguez Hills

Area of Focus: Lean and Six Sigma Essentials **Session Level:** Basic

The six sigma philosophy as defined in The Six Sigma Handbook states it is "the application of the scientific method to the design and operation of management systems and business processes which enable employees to deliver the greatest value to customers and owners." This philosophy is often misunderstood by managers of non-manufacturing organizations.

These managers feel that they do not have value for statistics, which are an integral element of six sigma, in their industry. Even managers who have completed basic college statistics fail correlate practical applications of statistics. Basic statistics involves the structured analysis of a quantitative data set. The most basic analysis of quantitative data is a common practice in most any process is a statistical analysis. Most managers do not recognize basic data analysis as statistics and perform these analyses without a formal process or consistency. This presentation develops a basic sequence for quantitative analysis of non-technical processes to quantify data, to analyze data, and to support fact-based decision making through the application of basic descriptive statistics. An intangible result of this presentation is the removal of the fear and intimidation of statistics and correlate the daily application of statistics in any process.

Reducing Methane Emissions Through Lean and Six Sigma

2:30pm-3:15pm

Presented by: Alex Vann, Duke Energy

Area of Focus: Supply Chain Strategies **Session Level:** Intermediate

A natural gas organization is leading the way to reduce methane and carbon emissions with the goal to have net-zero methane emissions by 2030 and net-zero scope 3 upstream and downstream emissions by 2050. These goals provide an actionable framework focused on decarbonizing natural gas while prioritizing reliability, affordability and increasingly clean energy to customers and communities. The organization is utilizing several advanced technologies to "see" and detect methane leaks in real-time, including satellite methane detection, image analytics, and Gas Cloud Imaging (GCI) cameras. To meet these goals, the organization has utilized Lean and Six Sigma methodology to ideate and implement the process changes needed to pilot this novel technology. This session will share a real-world example of how an organization is using process improvement principals to implement transformational work.



Beyond the Terms: Building Lean Six Sigma Thinking into an Organizational Culture

2:30pm-3:15pm

Presented by: Nanette Richardson, The James Cancer Hospital and Solove Research Institute & Sara Stevenson, The James Cancer Hospital and Solove Research Institute

Area of Focus: Lean, Six Sigma and Leadership **Session Level:** Intermediate

In today's economic and social climate, organizations are finding that it is more important than ever to be able to adjust to changes and outside forces quickly. Organizations must depend upon more than a process improvement department to optimize performance, quality, safety and customer satisfaction. The task really must engage leadership as well as all employees at all levels of the organization. In this session, participants will learn how deploying a sequential interactive and hybrid model for training in Lean Six Sigma can quickly and effectively build a culture of continuous improvement in all areas of an organization. The information provided will address content, delivery and design for a powerful mechanism to set your company on the path to a successful Lean Six Sigma culture and approach that permeates all levels of the organization. The efforts deployed will benefit all areas of daily operations.

Lean in Technology: The Secret Sauce

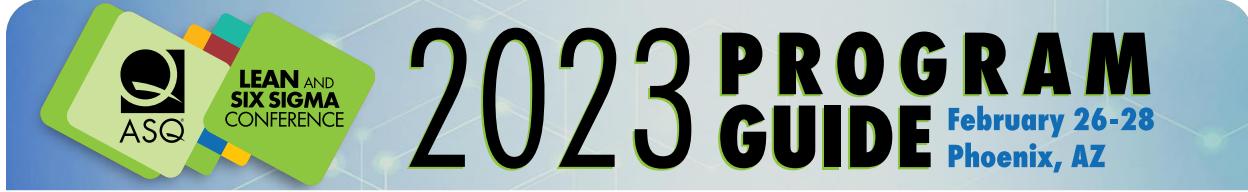
2:30pm-3:15pm

Presented by: Peg Pennington, MoreSteam

Area of Focus: Lean and Six Sigma Essentials **Session Level:** Intermediate

In 1990, Womack, Jones, and Roos published the transformational book, The Machine that Changed the World, introducing the world to the revolutionary Toyota Production System. The Lean Management System was an innovative concept utilized on the front lines of automotive production. Fast forward to 2022 and automotive companies are now hiring software engineers at a rate that outpaces all other engineering positions. An all-new virtual landscape is born - work that was once very visible has now transitioned into invisible, intangible processes. This presentation will provide a case study of how a global technology company utilizes Lean in software development. The Lean management system outlined allows for all aspects of the company to align on strategy, and problem-solving, and provides robust end-to-end value stream creation. Join the discussion to see how Lean can be effectively applied in the technology space, alongside other frameworks for software development.

(END OF CONCURRENT SESSIONS:
WORKSHOPS LISTED ON FOLLOWING PAGES)



Sunday, February 26

WORKSHOPS

The Operational Value of Paying Attention to Culture: Prevent & Reverse the Great Resignation

2:00pm-4:00pm

Presented by: Lizabeth Wesely-Casella, L-12 Services

Focus Area: Lean, Six Sigma and Leadership **Session Level:** Intermediate

Participants will learn to identify burnout, meet the staff 'where they are at,' promote engagement using tools and techniques and create clarity to build informed and engaged work communities. Using case studies, new tools and recommendations, and interactive exercises, attendees become problem-solvers, not passive listeners. The audience will leave with tangible tools they can use to develop robust engagement programs in which employees are motivated to participate. Outcomes include learning how to assess team health, aligning activities with challenges, and designing strategic solutions to reduce attrition.

Demonstrating the Functional Strategic Relevance of Lean Systems with Hoshin Kanri

2:00pm-4:00pm

Presented by: Jd Marhevko, ZF Group

Focus Area: Lean, Six Sigma and Leadership **Session Level:** Intermediate

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



2023 PROGRAM GUIDE

February 26-28
Phoenix, AZ

Monday, February 27

Use Behavior Management to Improve Root Cause Analysis (RCA) and Sustain Behavior Change

10:15am-12:15pm

Presented by: Paul Fjelsta, Accomplir Inc.

Focus Area: Lean, Six Sigma and Leadership

Session Level: Intermediate

In the '90s, while working for The Rummel-Brache Group (RBG), I learned about Dr. Rummler's Human Performance System, a Behavior Management (Behavioral Science) framework for understanding human behavior. In 2007, I began developing an enhanced Lean Sigma toolset that integrates Behavior Management concepts into DMAIC. It was apparent that RCA was well-suited to product and mechanical issues, but not very effective for "behavioral" failure modes. Though behavioral issues reside on the "People" rib of the Fishbone, the typical root causes are limited to training, procedures, job aids, etc. These are Antecedents in the Antecedents-Behavior-Consequences (ABC) framework from Behavior Management. Though at times

Antecedents are a root cause factor, the majority of "behavioral" issues exist due to inadequacies in the Consequence component of the ABC framework. Behavior Management proved that Consequences have a significantly greater impact on behavior change than Antecedents alone. Learn how to use the ABC tool and you will make a lasting improvement in your RCAs. This session focuses on Behavior Management key concepts that illustrate the "WHY" and "HOW" to improve the Behavioral Dimension in RCAs. Attendees will learn how to 1) identify behaviors, 2) annotate Behaviors on process workflows and 3) facilitate an ABC Analysis.

Unlocking Value Realization Using ADKAR and Force Field Analysis

10:15am-12:15pm

Presented by: Tim Creasey, Prosci

Focus Area: Lean and Six Sigma Essentials

Session Level: Basic

Have you ever mapped a value stream perfectly yet struggle to get engagement from the organization? Have you ever run a high impact 5S event only to return 30 days later to a total mess? Have you ever improved a key process only to have employees return to the old way of doing things? In the end, if your project's solution is not adopted and used by the people in your organization, the project will not deliver the expected project outcomes. But you do not need to leave the people side of change to chance. Change management is a structured, enabling framework that helps individuals successfully transition from their current state (how they do their job today) to their future state (how they will do their job once the change is in place). In this workshop, learn how to combine the Prosci ADKAR model of individual change with Kurt Lewin's Force Field Analysis to amplify the driving forces of successful change and reduce the restraining forces at each adoption milestone. This powerful, practical approach will allow you to deliver more value and achieve project success by surfacing and removing people side change obstacles.

Schedule as of February 14, 2023.
Subject to change.



Learn more and register at
<https://asq.org/conferences/six-sigma/registration>



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

3:00pm-5:00pm

Presented by: Leigh Ann Schildmeier, Park Avenue Solutions

Focus Area: Lean, Six Sigma and Leadership **Session Level:** Basic

Are you looking for a better way to lead people toward continuous improvement with superior results? Instead of training in another tool with specific applications, Toyota Kata teaches a simple method for creating a shared way of thinking and doing that can be applied to any type of challenge. Toyota Kata doesn't preach "the Toyota solution" to various problems. It provides a framework for building an effective, sustainable continuous improvement culture that can be learned and implemented quickly in any organization. This workshop will teach participants the powerful Kata behavior routines through demonstration, observation, and a fun, hands-on learning experience that will give participants a jumpstart on a new skill to take back with them and implement right away. After the workshop, participants will be able to:

1. Use the Starter Kata to develop their own daily practice.
2. Understand and explain how the Improvement Kata works and develops a mindset that makes people better problem-solvers.
3. Understand the Coaching Kata and how it teaches and reinforces the Improvement Kata thinking pattern in Kata Learners.
4. Recognize the importance of aligning the "big-picture" Vision/Challenge and the "next step" Target Condition to optimize improvement activities across the team or organization.

Modeling Techniques for Supply Chain Optimization

3:00pm-5:00pm

Presented by: Lars Maaseidvaag, MoreSteam

Focus Area: Supply Chain Strategies **Session Level:** Intermediate

Organizations have faced unprecedented interruptions to their supply chains in the last few years. Excess variation and instability have become the 'new normal'. Traditional Lean Six Sigma tools may struggle to deal with this lack of stability, so how can we extend our toolkit to model and predict the performance of our supply chain in this persistent climate of disruption? This workshop will examine four different modeling techniques and apply them to various problems that impact the supply chain. Stochastic techniques, Monte Carlo and discrete event simulation, will be used to understand the impact of variation. Mathematical optimization will be used to determine the best use of constrained labor and materials. We will compare and contrast these methods to understand the most appropriate use for each modeling technique within the context of Lean Six Sigma's continuous improvement and design work.