

Abstract for 8th World Congress for Maintenance and Asset Management

TOPIC: Enhancing Asset Management Through Root Cause Analysis: A Pathway to Better Decision-Making and ISO 55001 Compliance

Author: Ganesh Sonowane

Company: Independent Consultant Ex. Reliance, Tansee petrochemical and Qatar Energy

Cell Phone Number: +91 7559349275

Email: asonowane1@gmail.com

City, Country: Pune, Maharashtra, India

Abstract:

This presentation explores the integration of Root Cause Analysis (RCA) into Asset Management frameworks, emphasizing its pivotal role in enhancing decision-making and compliance with ISO 55001 standards. In the context of digital transformation and evolving technologies, RCA emerges as a critical tool for systematic problem-solving, enabling organizations to identify and address the root causes of asset failures and inefficiencies.

Through the lens of "**Analysis of Results and Decision-Making Technologies**," the discussion will highlight RCA's contribution to asset performance evaluation, risk management, and lifecycle decision-making. Key aspects include the use of RCA methodologies like Taproot®, 5 Whys, and Fault Tree Analysis to support evidence-based decisions. Furthermore, the session will demonstrate how RCA aligns with ISO 55001's "**Plan-Do-Check-Act**" framework, fostering continuous improvement and stakeholder confidence.

The presentation also focuses on empowering asset management engineers with the competencies needed to analyze results and make informed decisions. By integrating RCA into digital Asset Performance Management (APM) systems and Computerized Maintenance Management Systems (CMMS), organizations can enhance asset reliability, optimize resource utilization, and extend asset lifecycles.

A special emphasis will be placed on aging asset management and decision-making methodologies for disposal, showcasing practical steps for embedding RCA into asset management strategies. Case studies will illustrate successful RCA integration, resulting in reduced operational costs, improved safety, and compliance with legal and regulatory standards. This session provides a roadmap for leveraging RCA to create value and ensure sustainable operational and financial outcomes. It invites attendees to explore how structured RCA programs can transform maintenance practices, optimize asset performance, and achieve alignment with organizational objectives.

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6. Practical Case Studies and Implementation Steps
7. Continuous Improvement and Stakeholder Confidence

The idea is uncover the transformative power of RCA in achieving excellence in asset management.