Melisa J. Buie

Strategic Operations and Manufacturing Leader | Global Business Transformer | Author



Dr. Melisa Buie makes lasers and solves problems. Her three key areas of expertise include business transformation, operational efficiency, and strategic planning. Melisa has demonstrated the ability to translate financial objectives into realistic strategies and plans. She has led transformation efforts of acquisition and integration activities.

She is the Global Director of Corporate Operational Excellence with Coherent, Inc., a photonics solution company, and currently serves on the Board of Directors for the Southwest Regional Association for Manufacturing Excellence. In her role, Melisa is currently leading a global manufacturing and cultural transformation with Lean at Coherent. She is driving game-changing, extraordinary results.

During her 20+ years of leadership experience, Dr. Buie has focused on leading business and manufacturing transformation. Melisa has been active in all stages of product development from startup conception, design, deployment, and introduction, as well as customer support. Melisa has worked in government, industry, and academia. She has led global teams and businesses. She has extensive experience in operations and engineering, lean manufacturing, and global implementation.

As a published author, Melisa believes in giving back. She shared what she has learned about problem solving and experimentation in her book, Problem Solving for New Engineers. She has published 40+ peer-reviewed technical journal articles. She has also published articles in corporate newsletters, magazines and has a blog focused on lean manufacturing. She regularly speaks at conferences and on podcasts.

Melisa has a passion for accelerating learning for new engineers. She serves on the Industry Advisory Council for San Jose State University Material Science Engineering Department. She designed and taught courses for San Jose State University Material Science Engineering program for 10 years to MS Candidates.

Dr. Buie is laser focused on continued growth. She holds 5 patents. Her degrees include a PhD in Nuclear Engineering/Plasma Physics from the University of Michigan and a MS in Physics from Auburn University. She has a Six Sigma Black Belt from the American Society for Quality and LEAD Certification in Corporate Innovation from Stanford University Graduate School of Business.

Dr. Buie is an engaged leader in her community. She currently serves on the Executive Council for The Episcopal Diocese of Northern California and on the vestry for her local congregation. Melisa has represented her local congregation on the Peninsula Deanery for the past 3 years.

Corporate leaders can count on Melisa for strategic solutions to business gaps and acquisition integration, as well as dramatic efficiency gains.