NORTH CAROLINA STATE UNIVERSITY

OPERATIONS RESEARCH PROGRAM SEMINAR SERIES

April 22nd, 2024 4:30 PM-5:45 PM

In-Person: 4290 Fitts-Woolard Hall **Zoom** details – bottom of page

Jonathan H. Owen

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TitleLeveraging OR/MS and Analytics in Automotive

Abstract

In the fiercely competitive and capital-intensive automotive sector, effective decision-making is paramount for manufacturer success. Long product development cycles, significant upfront investments, and diverse customer preferences underscore the need for advanced analytics and operations research. This presentation delves into the automotive landscape through real-world examples and case studies from the speaker's own experience, providing attendees with a deeper understanding of how analytics can optimize efficiency, mitigate risks, and enhance both customer satisfaction and OEM profitability. Ultimately, unlocking the full potential of OR/MS and analytics requires practitioners to embrace a holistic problem-solving approach. This entails moving beyond point solutions that merely optimize current practices and processes to a strategic framing that comprehends the interconnectedness of key decisions and system-level opportunities.

Biography



Jonathan H. Owen, Ph.D., CAP

Jon recently retired from General Motors, where he served as head of GM's Advanced Analytics Center of Expertise, Director of Global R&D's Operations Research Lab, and Chief Scientist for AI/ML and Operations Research. With a career spanning over two decades at GM, he spearheaded strategic innovation in prescriptive analytics and applied data science, collaborating internally to boost revenue, profitability, and operational efficiency through improved datadriven decision making. He led internal research activities as well as collaboration with university partners, external labs, and other organizations to tackle GM's most significant technical challenges and advance the state-of-the-art knowledge in applied OR/MS and analytics. In 2023, Jon launched GM's internal AI Center, the strategic hub for catalyzing GM's AI transformation by fostering enterprise-wide collaboration, coordination, and thought leadership, enabling GM to seize the highest impact opportunities at speed and scale, while protecting its brands, customers, partners, and employees. His contributions span diverse functional areas that include Finance, Sales & Marketing, Product Development, Global Portfolio Planning, Supply Chain & Logistics, Manufacturing, Customer Care & Aftersales, and Customer Experience, and yielded over \$10B in bottom-line implementation impact at GM. Jon's contributions have been recognized by GM's highest internal awards, as well as external awards from SME, IISE, and INFORMS. He is a Fellow of INFORMS and IISE, and a recipient of Northwestern University's IE/MS Distinguished Alumni Award. In addition to serving on several advisory boards, Jon currently serves on the Board of Directors for MATHCOUNTS (www.mathcounts.org), a nonprofit organization that provides engaging math programs to middle school students of all ability levels to build confidence and improve attitudes about math and problem solving.

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