“Peak oil, scarcity, and rising prices? No, the energy industry is in a new era of abundance and price pressure. In Bits, Bytes, and Barrels, the authors give valuable context and advice on how digital technologies are mandatory tools for progressive energy leaders to turn disruptive challenges into a generational opportunity.”

Peter Tertzakian—Executive Director, Arc Energy Research Institute

“This is a timely, well-researched, practical and insightful book that plugs a much-needed gap in the market. If you are looking for a one-stop shop that brings together key digital themes and ideas in Oil and Gas in one place, then this is it—highly recommended.”

Dr. John Pillay—Global Digital Transformation Director, Worley Parsons

“Technology, innovation, and business model changes are impacting industry at a rapid pace—yet in some cases, not fast enough. Bits, Bytes, and Barrels is an excellent primer on existing and future innovation levers that the energy sector can incorporate to improve adaptability and competitiveness. Important reading for Boards, the C-suite, and those looking to understand how technology can move the needle or stand-up effective internal innovation. I highly recommend this book.”

Samantha Stuart—Vice President Strategy and Corporate Development, TransCanada

“Geoffrey Cann and Rachael Goydan’s Bits, Bytes, and Barrels: The Digital Transformation of Oil and Gas is a handbook of how to develop digital strategy and culture and get IT and operations engaged. The book is both interesting for those familiar with oil and gas, and easy to understand for those who are not. A great resource.”

Dr. Soheil Asgarpoor—President, Petroleum Technology Alliance of Canada
**THE OIL AND GAS INDUSTRY IS AT A CROSSROADS**

Recent low prices, rapidly growing alternative fuels like renewables, the permanent swing from peak oil to super abundance, shifting consumer preferences, and global pressures to decarbonize suggest a challenged industry for the foreseeable future. Digital advances offer ways to lower costs of production, improve productivity, reduce carbon emissions, and regain public confidence. A wait-and-see attitude to digital innovation has failed many industries already, and the leaders of oil and gas urgently need guidance on how digital both disrupts and enhances their industry.

Written by the world’s leading experts on the intersection of digital technologies and the oil and gas industry, *Bits, Bytes, and Barrels* sets out the reasons why adoption is slow, describes the size and scale of both the opportunity and the threat from digital, identifies the key digital technologies and the role that they play in a digital future, and recommends a set of actions for leaders to take to accelerate the adoption of digital in the business.

Providing an independent and expert perspective, *Bits, Bytes, and Barrels* addresses the impacts of digital across the breadth of the industry—from onshore to offshore, from upstream to midstream to integrated—and outlines a roadmap to help the decision-makers at all levels of the industry take meaningful action toward promising and rewarding digital adoption.

Former partner with one of the Big 4 consulting firms, **GEOFFREY CANN** has thirty years of experience advising oil and gas, energy, and technology companies to help create lasting value. He specializes at the intersection of digital technologies and the oil and gas industry. Geoffrey teach regularly at the MBA level on energy issues, and is widely sought after as a public speaker and commentator on issues facing the industry. He publishes the #1 ranked website and podcast on digital oil and gas. www.geoffreycann.com

**RACHEL GOYDAN** values lifelong learning and innovation and always aims to integrate these concepts into the work she does. Since joining Deloitte in 2001, she has worked as a consultant with clients across multiple industries. Her journey has taken her to work directly, or as Board volunteer, in education, banking, telecommunications, technology, and—for the last twelve years—energy. Rachael met Geoffrey in 2017 when they began collaborating to bring digital innovation to clients across the energy value chain. She earned her undergraduate degree in psychology from the University of Pennsylvania and her MBA (with a focus on information technology and business transformation) from the Sloan School of Management at MIT.