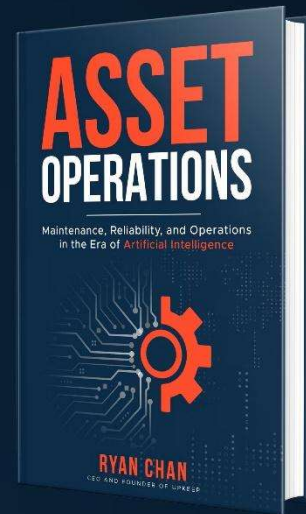




# Rewriting the Rules: AI-First Asset Operations for the Modern Industrial Era



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I had the pleasure of reading Ryan Chan's new book, *Asset Operations – Maintenance, Reliability and Operations in the Era of Artificial Intelligence*. What an excellent resource! It is one of the most engaging books I have read in the maintenance, reliability, and operations (MRO) arena in many years.

Before Ryan gets into the heart of the material, the reader is presented with a Preface, a Reflection Question, an Action Checklist, and an Introduction that set the stage for what lies ahead. The Preface gives background information and introduces The Asset Operations Management (AOM) concept. Implemented properly, AOM ensures data is strong enough to support the intelligent systems of the future. The Reflection Question, "What specific challenges have you encountered in aligning maintenance, reliability, and operations in your organization?" should be thoughtfully answered so the reader will be focused on finding answers. This is followed by the Action Checklist – "document key areas of misalignment within your teams to prepare for the chapters ahead". Once the reader has completed this groundwork, the following chapters give instruction on how AOM can transform an organization, prepare for future AI-driven innovation, and help an organization thrive in an increasingly complex world.

**Part One: Why Assets Operations Management** dives into a couple of foundational topics. First is "Where are we and how did we get here?" This is followed up with a deeper dive into the concepts of AOM explaining the shift in mindset needed to

move successfully into the era of AI. Key concepts noted are (1) linking long term metrics to business goals and (2) when combined AOM and AI will not cost jobs but will allow teams to do the work they were hired to perform. Understanding the AOM framework lays the foundation for the following chapters on the eight pillars.

**Part 2: The Eight Pillars of Asset Operations** identifies the pillars and explains how they are the core ideas behind the larger concept, providing a better understanding of what asset operations truly entail. The eight pillars are as follows:

1. MRO Operate Together and Align to Achieve a Common Goal
2. Data Must Flow Into a Single Repository
3. Measure Teams Based on Why They Do Something Rather Than What They Do
4. Collect the Right Data, Display the Best Insights, and Provide Actionable Feedback Through a Centralized Command Center
5. Continuous Improvement as an Abundant Lifecycle, Not Just a Point In Time
6. Everything Measured Can Be Improved
7. Data Accessible From Wherever You Are
8. MRO Are Revenue Drivers, Not Cost Centers

These all combine to ensure collaboration between the MRO groups, drive data driven decision making, and improve long term asset health. This larger concept will be the catalyst for using AI and the emphasis of Part 3.

**Part 3: Implementing Asset Operations At Your Company** does a deep dive into Common Implementation Challenges, AOM Implementation Best Practices, and 10 Ways to Overcome the Challenges of AOM Implementation. These three chapters help form the guiding vision for any AOM team - collecting asset data, analyzing insights, and acting all with the goal of optimizing equipment health and performance. Once these challenges have been met and AOM implemented then the AOM team can look forward into the rapidly changing role AI plays in maintenance and reliability.

**Part 4: Asset Operations in the Era of Artificial Intelligence** reinforces that AI is no longer a future concept and is already shaping how work is done. In this section, Ryan explores the trajectory of these changes and challenges. The two chapters cover where we are today and where we will be in the next decade - part wake up call and part road map. Those who embrace the shift from where we are today to what the next decade will hold will be the ones shaping the future of asset operations.

I found Ryan's book to be extremely informative and readable. It is well thought out and includes Key Takeaways at the end of each chapter. Scattered throughout the book

are State of the Industry write-ups by maintenance leaders, managers and decision makers in various industries. Ryan is the CEO and Founder of UpKeep, a Forbes Under 30 honoree in Manufacturing and a UC Berkeley-trained Chemical Engineer. In his book, he gives practical steps to achieve the goals of AOM. For anyone who is currently using AI, planning to use AI, or wants to succeed in the future MRO field; this book is a must read. Once read, do not put the book away but follow its well researched blueprint to achieve AOM success now and in the future.