



customer service. The main wastes are: over-production against plan; waiting time of operators and machines; unnecessary transportation; waste in the process itself; excess stock of material and components; non value-adding motion; defects in quality. The diversity of these issues will be covered from algorithms, mathematical models, and software engineering by design methodologies and technical or practical solutions. This book intends to provide the reader with a comprehensive overview of the current state, cases studies, hardware and software solutions, analytics, and data science in dependability engineering.

Effective organizations recognize that the use of Six Sigma and Lean methods can improve and control process performance. This text helps prepare students for jobs in those organizations with examples from all types of industries, including manufacturing, banking, government, hospitals, and logistics.

The world's leading expert on Lean Six Sigma provides the missing link for reducing waste and taking operations to the next level: Artificial Intelligence "Whatever the industry, there is an executive with the grit and determination to apply AI to attain the fastest growth, the highest investment returns, to dominate that industry. The only question is: will it be you?" –from Lean Six Sigma in the Age of Artificial Intelligence Combine the power of AI and LSS to seize the competitive advantage—quickly, decisively, and permanently Since 2001, business leaders have been using Lean Six Sigma (LSS) to drive improvements across industries, enabling their companies to reduce cycle time and waste, thus improving revenue and profits. Now they can finally unlock their company's full potential by combining LSS and AI. In Lean Six Sigma in the Age of Artificial Intelligence, the world's most respected expert on LSS, Michael L. George, Sr., shows how to harness the power of the technology that promises changing everything as we know it—Artificial Intelligence—to dramatically enhance any LSS management program. This game-changing guide takes you through the process of using AI to unlock maximum speed, solve complex manufacturing challenges, reduce waste, increase company profits, and ultimately outflank your competition at every turn. With Lean Six Sigma in the Age of Artificial Intelligence, you'll take this revolutionary approach to its limits—and that will make all the difference between business success and failure in the coming decades.