

Digital Technologies for Sustainability and Quality Control

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Description:

Digital technologies play a pivotal role in improving sustainability and quality control across various industries. By leveraging data analytics, artificial intelligence, and the Internet of Things (IoT), organizations can optimize resource management, reduce waste, and ensure compliance with environmental standards. Smart sensors can monitor energy usage and emission, enabling companies to implement corrective measures. In quality control, digital tools improve automation of inspection processes, providing precise data to enhance product consistency and reliability. Blockchain technology can improve traceability in supply chains, ensuring sustainable practices are followed from production to delivery. Businesses must explore and utilize these technologies to improve their operational efficiency while contributing to sustainable development.

Digital Technologies for Sustainability and Quality Control examines the usefulness of digital technology in creating sustainable business practices and effective quality control. It addresses the positive environmental and economic effects of smart manufacturing and product development. This book covers topics such as waste management, data analytics, and environmental monitoring, and is a useful resource for business owners, computer engineers, environmental scientists, academicians, and researchers.

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Topics Covered:

- Blockchain
- Data Analytics
- Energy Efficiency
- Environmental Monitoring
- Internet of Things
- Quality Automation
- Resource Optimization
- Smart Manufacturing
- Supply Chain Management
- Waste Management

Subject: Computer Science and Information Technology

Readership Level: Advanced-Academic Level (Research Recommended)

Classification: Edited Reference

Research Suitable For: Advanced Undergraduate Students; Graduate Students; Researchers; Academicians; Professionals; Practitioners

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