

## Data Driven Energy Centered Maintenance

### Authors:

Fadi Alshakhshir and Marvin T. Howell

Over recent years, many new technologies have been introduced to drive the digital transformation in the building maintenance industry. The current trend in digital evolution involves data-driven decision making which opens new opportunities for an energy centered maintenance model. Artificial Intelligence and Machine Learning are helping the maintenance team to get to the next level of maintenance intelligence to provide real-time early warning of abnormal equipment performance.

This edition follows the same methodology as the First. It provides detailed descriptions of the latest technologies associated with Artificial Intelligence and Machine Learning which enable data-driven decision-making processes about the equipment's operation and maintenance.

Technical topics discussed in the book include:

- Different Maintenance Types and The Need for Energy Centered Maintenance
- The Centered Maintenance Model
- Energy Centered Maintenance Process
- Measures of Equipment and Maintenance Efficiency and Effectiveness
- Data-Driven Energy Centered Maintenance Model:
  - Digitally Enabled Energy Centered Maintenance Tasks
  - Artificial Intelligence and Machine Learning in Energy Centered Maintenance
  - Model Capabilities and Analytics Rules
  - Building Management System Schematics

The book contains a detailed description of the digital transformation process of most of the maintenance inspection tasks as they move away from being manually triggered. The book is aimed at building operators as well as those building automation companies who are working continuously to digitalize building operation and maintenance procedures. The benefits are reductions in the equipment failure rate, improvements in equipment reliability, increases in equipment efficiency and extended equipment lifespan.

## DATA DRIVEN ENERGY CENTERED MAINTENANCE

Second Edition



Fadi Alshakhshir  
Marvin T. Howell



### River Publishers Series in Energy Management

ISBN: 9788770223577

e-ISBN: 9788770223560

Available From: May 2021

Price: \$ 180.00



[www.riverpublishers.com](http://www.riverpublishers.com)  
[marketing@riverpublishers.com](mailto:marketing@riverpublishers.com)