Record Nr. UNINA9910299841103321 Autore **Duan Qing** Titolo Data-Driven Optimization and Knowledge Discovery for an Enterprise Information System / / by Qing Duan, Krishnendu Chakrabarty, Jun Zeng Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2015 **ISBN** 3-319-18738-4 Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (165 p.) Disciplina 025.04 620 621.3815 621.382 Soggetti Electrical engineering Electronic circuits Information storage and retrieval Communications Engineering, Networks Circuits and Systems Information Storage and Retrieval Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references. Nota di contenuto Introduction -- Production Simulation Platform -- Production Workflow Optimizations -- Predictions of Process-Execution Time and Process-Execution Status -- Optimization of Order-Admission Policies --Conclusion. Sommario/riassunto This book provides a comprehensive set of optimization and prediction techniques for an enterprise information system. Readers with a background in operations research, system engineering, statistics, or data analytics can use this book as a reference to derive insight from data and use this knowledge as guidance for production management. The authors identify the key challenges in enterprise information management and present results that have emerged from leading-edge

research in this domain. Coverage includes topics ranging from task scheduling and resource allocation, to workflow optimization, process

time and status prediction, order admission policies optimization, and enterprise service-level performance analysis and prediction. With its emphasis on the above topics, this book provides an in-depth look at enterprise information management solutions that are needed for greater automation and reconfigurability-based fault tolerance, as well as to obtain data-driven recommendations for effective decision-making.