Book Alert

## MEETING THE CHALLENGES OF DATA QUALITY MANAGEMENT

Laura Sebastian-Coleman
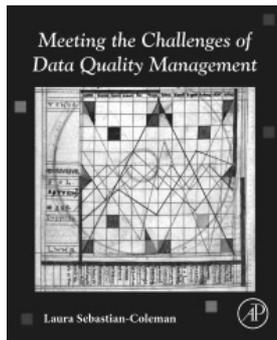
February 2022| 250pp.| Paperback| 9780128217375| Academic Press

The book outlines the foundational concepts of data quality management and its challenges. The book describes the importance of high-quality data to organizations wanting to leverage their data and, more generally, to people living in today's digitally interconnected world; explores the five challenges in relation to organizational data, including 'Big Data', and proposes approaches to meeting them; clarifies how to apply the core capabilities required for an effective data quality management program (data standards definition, data quality assessment, monitoring and reporting, issue management, and improvement) as both stand-alone processes and as integral components of projects and operations and provides data quality practitioners with ways to communicate consistently with stakeholders

CLASSIFICATION MADE RELEVANT: HOW SCIENTISTS BUILD AND USE CLASSIFICATIONS AND ONTOLOGIES

Berman, Jules J.
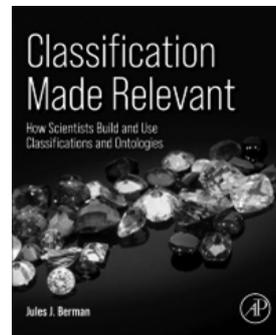
March 2022| 450 pp.| Paperback| 9780323917865| Academic Press

Classification Made Relevant explains how classifications and ontologies are designed, and how they are used to analyse scientific information. It is through our description of the relationships among classes of objects that we are able to simplify knowledge and explore the ways in which individual classified objects behave.

The book begins by describing the fundamentals of classification and leads up to a description of how computer scientists use object-oriented programming languages to model classifications and ontologies. Numerous examples are chosen from the Classification of Life, the Periodic Table of the Elements, and the symmetry relationships contained within the Classification Theorem of Finite Simple Groups. When these three classifications are tied together, they provide a relational hierarchy connecting all of the natural sciences.

KNOWLEDGE IS POWER IN FOUR DIMENSIONS: MODELS TO FORECAST FUTURE PARADIGMS FORECASTING ENERGY FOR TOMORROW'S WORLD WITH MATHEMATICAL MODELING AND PYTHON PROGRAMMING DRIVEN ARTIFICIAL INTELLIGENCE

Bahman Zohuri, Farhang Mossavar Rahmani, and Farahnaz Behgounia
June 2022| 800 pp.| Paperback|
9780323951128| Academic Press

Many industries are aggressively growing their digital infrastructure and with it comes an increased demand on electricity driven by both renewable and non-renewable sources of energy. Energy engineers are quickly learning processing information, such as deep learning and AI, but there is a gap on how to utilize AI technology while maintaining sustainable energy needs and invest in the most efficient decisions for energy companies. The reference covers many introductory programming tools such as Python, Scikit, TensorFlow, Keras and more to utilize linear and non-linear regression models for the purpose of forecasting. Big data in structured and unstructured processing are included, helping the engineer understand the right information for real-time processing. Packed with examples, the book provides the knowledge of information to make more trusted decisions, forecast energy

needs, and build climate resiliency within their operations. Gain fundamental knowledge in technology infrastructure including AI, Machine Learning, and Fuzzy Logic; Bridge data knowledge into near-term and long-term forecasting models with examples involving both renewable and non-renewable energy outcomes; Advance climate resiliency and build a Business Resiliency System for your assets.

## DIGITAL LIBRARIES: ADVANCING OPEN SCIENCE

Sadia Vancauwenbergh (Editor)

June 2021| 128pp.|
Hardback|9781839682001| IntechOpen

Over the past decades, traditional academic library environments have transformed into digital libraries. This has resulted in many challenges for libraries in terms of the reinvention of libraries' roles and organizations, the skill sets of librarians, and library infrastructure. At the same time, this profound transformation has opened the door to many new avenues, such as the support and advancement of Open Science. This book offers insights into the transformation of traditional library environments to digital libraries and details how digital libraries can contribute to Open Science, in particular to Open Access, FAIR and Open Data, and Open Education, by describing methods, criteria, strengths, and weaknesses as well as applications.

THE QUALITATIVE LANDSCAPE OF INFORMATION LITERACY RESEARCH: PERSPECTIVES, METHODS AND TECHNIQUES

Annemaree Lloyd
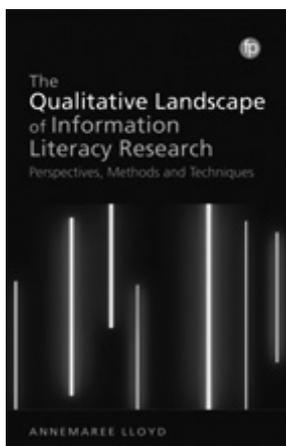
September 2021| 256 pp.| Paperback| 9781783305438| Facet Publishing

The book is a landmark publication that will develop and support readers' understanding of how information literacy research and teaching is framed, developed and produced. Written by a leading expert in the field, it introduces and describes the key approaches taken by qualitative researchers, identifying core and specialist methods, techniques and theories. In each chapter, examples will illustrate how theory, types of pedagogical frameworks, methods and tools have been used. It covers theory and key concepts of information literacy; social theory framework and their application to information literacy research; exploration of the pedagogical frameworks that inform information literacy; a range of qualitative methods that shape information literacy research; data collection techniques and research design.

## METADATA IN THE DIGITAL LIBRARY: BUILDING AN INTEGRATED STRATEGY WITH XML

Richard Gartner
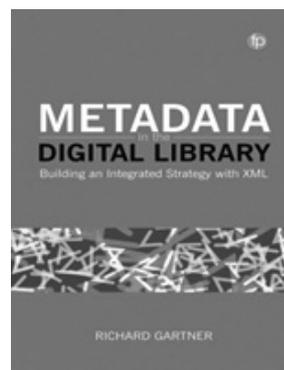
November 2021| 197 pp.| |Paperback|9781783304844| Facet Publishing

Metadata in the Digital Library is a complete guide to building a digital library metadata strategy from scratch, using established metadata standards bound together by the markup language XML. The book introduces the reader to the theory of metadata and shows how it can be applied in practice. It lays out the basic principles that should underlie any metadata strategy, including its relation to such fundamentals as the digital curation lifecycle, and demonstrates how they should be put into effect. It introduces the XML language and the key standards for each type of metadata, including Dublin Core and MODS for descriptive metadata and PREMIS for its administrative and preservation counterpart. Finally, the book shows how these can all be integrated using the packaging standard METS. Two case studies from the Warburg Institute in London show how the strategy can be implemented in a working environment.

BETWEEN THE SPREADSHEETS: CLASSIFYING AND FIXING DIRTY DATA

Susan Walsh
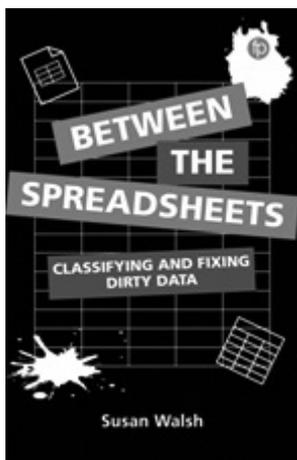
September 2021| 157 pp.| Paperback| 9781783305032| Facet Publishing

Dirty data is a problem that costs businesses thousands, if not millions, every year. In organizations large and small across the globe you will hear talk of data quality issues. What you will rarely hear about is the consequences or how to fix it. The book draws on classification expert Susan Walsh's decade of experience in data classification to present a fool-proof method for cleaning and classifying your data. The book covers everything from the very basics of data classification to normalisation and taxonomies, and presents the author's proven COAT methodology, helping ensure an organization's data is Consistent, Organized, Accurate and Trustworthy. A series of data horror stories outlines what can go wrong in managing data, and if it does, how it can be fixed.

THE USE OF STORYTELLING AND NARRATIVE TEACHING METHODS IN ACADEMIC LIBRARY INSTRUCTION: TELLING THEIR STORIES

Joanna Szurmak and MindyThuna
May 2022|260 pp.| Paperback|9780323858472| Chandos Publishing

The Use of Storytelling and Narrative Teaching Methods in Academic Library Instruction presents the benefits of narrative techniques in library teaching. The book presents examples of narrative teaching alongside evidence-based principles of instruction drawn from neuroscience, educational research, communications research and literary studies. Applicable insights are presented using a taxonomy of narrative techniques. Sections cover the power of narrative theory, an inventory of narrative in teaching practice, and academic library instruction. The book offers a practical solution to academic librarians looking to develop their teaching practices. It presents narrative teaching methods for academic librarians; sets up a taxonomy of narrative techniques to aid teachers; brings together neuroscience, education, communications research and literary studies; gives evidence-based principles of narrative for instruction and considers real-world examples of narrative techniques in library teaching.

WEB-SCALE DISCOVERY SERVICES: PRINCIPLES, APPLICATIONS, DISCOVERY TOOLS AND DEVELOPMENT HYPOTHESES

Roberto Raieli

April 2022**|** 210 pp.**|** Paperback**|** 9780323902984**|** Chandos Publishing

Web-Scale Discovery Services summarizes and presents the state-of-the-art in WSDS. The title promotes a middle-way between finding the best tool for each particular need and the search for the most reliable systems. The title identifies basic theoretical problems and offers practical solutions for librarians. The volume offers a summary of ideas from around the world, giving a new perspective that is backed up by strong theory. Offering a vision for libraries, this book also allows archivists, museum specialists, computer scientists, commercial operators and interested users to deepen their culture and information literacy. The book lays out the state-of-the-art in WSDS for contemporary libraries and institutions; presents an innovative take on information retrieval and digital document management; grounds thinking on a bibliographic basis, combining academic, practical and commercial aspects; offers a perspective on how WSDS and discovery tools

are seen and used internationally and provides a version of culture and information literacy of relevance to a broad-range of cultural specialists.

ENGAGING YOUR COMMUNITY THROUGH ACTIVE STRATEGIC MARKETING: A PRACTICAL GUIDE FOR LIBRARIANS AND INFORMATION PROFESSIONALS

Terry Kendrick
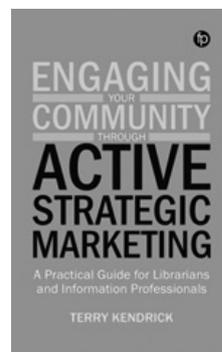
May 2021**|**E-book**|** 224 pp.**|** 9781783305193**|** Facet Publishing

Engaging your Community Through Active Strategic Marketing is a comprehensive resource that provides an overview of best practice strategic marketing, with advice on how to implement effective marketing activities in libraries and information services with the best chance of success. It takes each element of the strategic marketing domain and outlines both current marketing best practice and its detailed application in the library and information sector. It includes a set of tools and techniques to help reflection and progress towards effective marketing. Whether it is raising awareness of resources, increasing library use or demonstrating value, this book will help libraries from all sectors achieve their goals, communicate their benefits and present a clear and consistent image. It covers strategic marketing planning, understanding users and potential users,

identifying value and grouping users for marketing activity, understanding stakeholder management to support marketing activity, crafting messages, identifying effective marketing channels, digital marketing and evaluating the response to marketing activity.

## THE ACADEMIC TEACHING LIBRARIAN'S HANDBOOK
Claire McGuinness
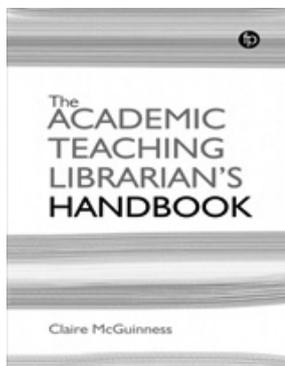
January 2021| 269 pp.| Paperback| 9781783304622| Facet Publishing

The Academic Teaching Librarian's Handbook is a comprehensive resource for academic library professionals and LIS students looking to pursue a teaching role in their work and to develop this aspect of their professional lives in a holistic way throughout their careers. It is built around the core ideas of reflective self-development and informed awareness of one's personal professional landscape. Through engaging with a series of exercises and reflective pauses in each chapter, readers are encouraged to reflect on their professional identity, self-image, self-efficacy and progress as they consider each of the different aspects of the teaching role. This handbook will provide a comprehensive resource on teaching, professional development and reflective practice for academic teaching librarians at all stages of their careers, explore the current landscape of teaching librarianship in higher education, and highlight the important developments.

THE CHIEF DATA OFFICER'S PLAYBOOK
Caroline Carruthers and Peter Jackson
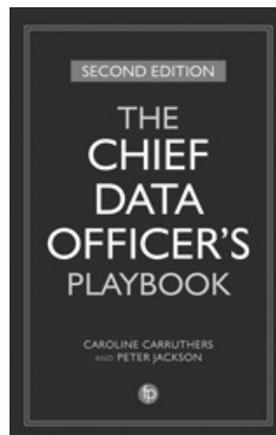
December 2020| 224 pp.| Paperback| 9781783304745| Facet Publishing

This fully revised and updated edition of the bestselling *Chief Data Officer's Playbook* offers new insights into the role of the CDO and the data environment. Written by two of the world's leading experts in data-driven transformation, it addresses the changes that have taken place in data, in the role of the CDO, and the expectations and ambitions of organizations. Most importantly, it will place the role of the CDO into the context of a c-suite player for organizations that wish to recover quickly and with long-term stability from the current global economic downturn. The new coverage includes the evolution of the CDO role, what those changes mean for organizations and individuals, and what the future might hold; a focus on ethics, the data revolution and all the areas that help readers take their first steps on the data journey; new conversations and experiences from an alumni of data leaders compiled over the past three years and new chapters and reflections on being a third-generation CDO and on working across a broad spectrum of organizations who are all on different parts of their data journey.