

Agile Data Warehousing Project Torrent

Agile Data Warehousing for the EnterpriseA Guide for Soluton Architects and Project LeadersNewnes

Agile Data Warehouse Design is a step-by-step guide for capturing data warehousing/business intelligence (DW/BI) requirements and turning them into high performance dimensional models in the most direct way: by modelstorming (data modeling | brainstorming) with BI stakeholders. This book describes BEAM, an agile approach to dimensional modeling, for improving communication between data warehouse designers, BI stakeholders and the whole DW/BI development team. BEAM provides tools and techniques that will encourage DW/BI designers and developers to move away from their keyboards and entity relationship based tools and model interactively with their colleagues. The result is everyone thinks dimensionally from the outset! Developers understand how to efficiently implement dimensional modeling solutions. Business stakeholders feel ownership of the data warehouse they have created, and can already imagine how they will use it to answer their business questions. Within this book, you will learn: Agile dimensional modeling using Business Event Analysis & Modeling (BEAM | Modelstorming; data modeling that is quicker, more inclusive, more productive, and more informed than traditional dimensional modeling) How to use and operate them more effectively Make informed decisions by identifying the strengths and weaknesses of different toolsets Navigate the trade-offs around consistency, usability, fault tolerance, and complexity Understand the distributed systems research upon which modern databases are built Peek behind the scenes of major online services, and learn from their architectures Data is just 'service' - the move to agile, thrived Discover 42 infinitely practical tips for succeeding with agile, right from the start! * Faves the road to success with a clear plan for creating and releasing software. * Works with any agile methodology, from XP to Scrum. * Practical, actionable, concrete tips for senior managers, program/project managers, developers, and product owners. * Eliminates 'buyer's remorse' associated with bumpy agile transitions, helping teams quickly build confidence and get results. Adopting agile looks easy - on paper! In reality, though, new agile teams encounter many unforeseen challenges. Some lose confidence in their ability to succeed; others muddle through, struggling to solve problems that others have already solved many times over. In this book Mitch Lacey brings together those solutions, helping new agile developers learn from others' experience quickly and painlessly. This engaging, realistic book systematically removes the pain of agile adoption, and breaks down the barriers to rapid success. The Scrum Field Guide is organized into 42 bite-size, practical tips - each supported with highly relevant real-world examples and case studies. Lacey presents a section of tips that apply to everyone on the agile team, from leaders to customers. Next, he offers sections specific to each role - including tips for management, program/project managers, team members, and product owners. Lacey answers the questions new agile adopters ask most often - including 'can I modify standard agile processes and still be agile?' and 'how on Earth can we release software within a short timeframe if we can't even do it in a long time that we're used to.' Along the way, he presents proven solutions for a wide variety of common problems - from prioritizing requirements to building release plans, creating workable software iterations to getting buy-in from skeptical executives.

A Comprehensive Guide for IT Professionals
The Next Frontier for Innovation, Competition, and Productivity
A Primer for the Data Scientist
Python for Data Analysis
Introduction to Databases and Data Warehouses
The Scrum Field Guide
The Elephant in the Fridge
Data Modeling Essentials, Third Edition, covers the basics of data modeling while focusing on developing a facility in techniques, rather than a simple familiarization with "the rules". In order to enable students to apply the basics of data modeling to real models, the book addresses the realities of developing systems in real-world situations by assessing the merits of a variety of possible solutions as well as using language and diagramming methods that represent industry practice. This revised edition has been given significantly expanded coverage and reorganized for greater reader comprehension even as it retains its distinctive hallmarks of readability and usefulness. Beginning with the basics, the book provides a thorough grounding in theory before guiding the reader through the various stages of applied data modeling and database design. Later chapters address advanced subjects, including business rules, data warehousing, enterprise-wide modeling and data management. It includes an entirely new section discussing the development of logical and physical modeling, along with new material describing a powerful technique for model verification. It also provides an excellent resource for additional lectures and exercises. This text is the ideal reference for data modelers, data architects, database designers, DBAs, and systems analysts, as well as undergraduate and graduate-level students looking for a real-world perspective. Thorough coverage of the fundamentals and relevant theory. Recognition and support for the creative side of the process. Expanded coverage of applied data modeling includes new chapters on logical and physical database design. New material describing a powerful technique for model verification. Unique coverage of the practical and human aspects of modeling, such as working with business specialists, managing change, and resolving conflict.
If you create, manage, operate, or configure systems running in the cloud, you're a cloud engineer—even if you work as a system administrator, software developer, data scientist, or site reliability engineer. With this book, professionals from around the world provide valuable insight into today's cloud engineering role. These concise articles explore the entire cloud computing experience, including foundations, architecture, and migration. You'll delve into security and compliance, operations and reliability, and software development. And examine networking, organizational culture, and more. You're sure to find 1, 2, or 97 things that inspire you to dig deeper and expand your own career. "Three Keys to Making the Right Multicloud Decisions," Brendan O'Leary "Serverless Bad Practices," Manases Jesuino Galindo Bello "Failing a Cloud Migration," Lee Achison "Treat Your Cloud Environment as If It Were On Premises," Iyana Garry "What Is Toil, and Why Are SREs Obsessed with It?," Zachary Nickens "Lean QA: The QA Evolving in the DevOps World," Theresa Neate "How Economics of Scale Work in the Cloud," Jon Moore "The Cloud Is Not About the Cloud," Ken Corless "Data Gravity: The Importance of Data Management in the Cloud,"

Agile Data Warehouse Design
Concepts, Principles, and Practices
Expert techniques for effective data analytics and business intelligence
Data Modeling Essentials
Relentlessly Practical Tools for Data Warehousing and Business Intelligence Remastered Collection
Data Wrangling with Pandas, NumPy, and IPython
Project Management
You have to make sense of enormous amounts of data, and while the notion of 'agile data warehousing might sound tricky, it can yield as much as a 3-to-1 speed advantage while cutting project costs in half. Bring this highly effective technique to your organization with the wisdom of agile data warehousing expert Ralph Hughes. Agile Data Warehousing Project Management will give you a thorough introduction to the method as you would practice it in the project room to build a serious "data mart. Regardless of where you are today, this step-by-step implementation guide will prepare you to join or even lead a team in visualizing, building, and validating a single component to an enterprise data warehouse. Provides a thorough grounding on the mechanics of Scrum as well as practical advice on keeping your team on track includes strategies for getting accurate and actionable requirements from a team's business partner Revolutionary estimating techniques that make forecasting labor far more understandable and accurate Demonstrates a blends of Agile methods to simplify team management and managing diverse teams across IT specialties Enables you and your teams to start simple and progress steadily to world-class performance levels

Refined and streamlined, SYSTEMS ANALYSIS AND DESIGN IN A CHANGING WORLD 7E helps students develop the conceptual, technical, and managerial foundations for systems analysis design and implementation as well as project management principles for systems development. Using case driven techniques, the succinct 14-chapter text focuses on content that is key for success in today's market. The authors' highly effective presentation teaches both traditional (structured) and object-oriented (OO) approaches to systems analysis and design. The book highlights use cases, use diagrams, and use case descriptions required for a modeling approach, while demonstrating their application to traditional, web development, object-oriented, and service-oriented architecture approaches. The Seventh Edition's refined sequence of topics makes it easier to read and understand than ever. Regrouped analysis and design chapters provide more flexibility in course organization. Additionally, the text's running cases have been completely updated and now include a stronger focus on connectivity in applications. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Big Data is the biggest game-changing opportunity for marketing and sales since the Internet went mainstream almost 20 years ago. The data big bang has unleashed torrents of terabytes about everything from customer behaviors to weather patterns to demographic consumer shifts in emerging markets. This collection of articles, videos, interviews, and slideshares highlights the most important lessons for companies looking to turn data into above-market growth: Using analytics to identify valuable business opportunities from the data to drive decisions and improve marketing return on investment (MROI) Turning those insights into well-designed products and offers that delight customers Delivering those products and offers effectively to the marketplace. The goldmine of data represents a pivot-point moment for marketing and sales leaders. Companies that inject big data and analytics into their operations show productivity rates and profitability that are 5 percent to 6 percent higher than those of their peers. That's an advantage no company can afford to ignore.

Perform fast interactive analytics against different data sources using the Trino high-performance distributed SQL query engine. With this practical guide, you'll learn how to conduct analytics on data where it lives, whether it's Hive, Cassandra, a relational database, or a proprietary data store. Analysts, software engineers, and production engineers will learn how to manage, use, and even develop with Trino. Initially developed by Facebook, open source Trino is now used by Netflix, AirbnB, LinkedIn, Twitter, Uber, and many other companies. Matt Fuller, Manfred Moser, and Martin Traverso show you how a single Trino query can combine data from multiple sources to allow for analytics across your entire organization. Get started: Explore Trino's use cases and learn about tools that will help you connect to Trino and query data Go deeper: Learn Trino's internal workings, including how to connect to and query data sources with support for SQL statements, operators, functions, and more Put Trino in production: Secure Trino, monitor workloads, tune queries, and connect more applications; learn how other organizations apply Trino

The Kimball Group Reader
The Data Warehouse Lifecycle Toolkit
A Guide for Solution Architects and Project Leaders
Agile: The Insights You Need from Harvard Business Review
Give Your Data Meaning
Trino: The Definitive Guide
Practical Advice for Your First Year

Get complete instructions for manipulating, processing, cleaning, and crunching datasets in Python. Updated for Python 3.6, the second edition of this hands-on guide is packed with practical case studies that show you how to solve a broad set of data analysis problems effectively. You'll learn the latest versions of pandas, NumPy, IPython, and Jupyter in the process. Written by Wes McKinney, the creator of the Python pandas project, this book is a practical, modern introduction to data science tools in Python. It's ideal for analysts new to Python and for Python programmers new to data science and scientific computing. Data science and machine learning are available on GitHub. Use the IPython shell and Jupyter notebooks for exploring and computing. Learn basic and advanced features in NumPy (Numerical Python) Get started with data analysis tools in the pandas library Use flexible tools to load, clean, transform, merge, and reshape data Create informative visualizations with matplotlib Apply the pandas groupby facility to slice, dice, and summarize datasets Analyze and manipulate regular and irregular time series data Learn how to solve real-world data analysis problems with thorough, detailed examples

A thorough update to the industry standard for designing, developing, and deploying data warehouse and business intelligence systems The world of data warehousing has changed remarkably since the first edition of The Data Warehouse Lifecycle Toolkit was published in 1998. In that time, the data warehouse industry has reached full maturity and acceptance, hardware and software have made staggering advances, and the techniques promoted in the premiere edition of this book have been adopted by nearly all data warehouse vendors and practitioners. In addition, the term "business intelligence" emerged to reflect the mission of the data warehouse: wrangling the data out of source systems, cleaning it, and delivering it to add value to the business. Ralph Kimball and his colleagues have refined the original set of Lifecycle methods and techniques based on their consulting and training experience. The authors understand first-hand that a data warehousing/business intelligence (DW/BI) system needs to change as fast as its surrounding organization evolves. To that end, they walk you through the detailed steps of designing, developing, and deploying a DW/BI system. You'll learn to create adaptable systems that deliver data and analyses to business users so they can make better business decisions.

Master the most agile and resilient design for building analytics applications: the Unified Star Schema (USS) approach. The USS has many benefits over traditional dimensional modeling. Witness the power of the USS as a single star schema that serves as a foundation for all present and future business requirements of your organization. Data warehouse legend Bill Inmon and business intelligence innovator, Francesco Puppini, explain step-by-step why the Unified Star Schema is the recommended approach for business intelligence designs today, and show through many examples how to build and use this new solution. This book contains two parts. Part I, Architecture, explains the benefits of data marts and data warehouses, covering how organizations progressed to their current state of analytics, and to the challenges that result from current business intelligence architectures. Chapter 1 covers the drivers behind and the characteristics of the data warehouse and data mart. Chapter 2 introduces dimensional modeling concepts, including fact tables, dimensions, star joins, and snowflakes. Chapter 3 recalls the evolution of the data mart. Chapter 4 explains Extract, Transform, and Load (ETL), and the value ETL brings to reporting. Chapter 5 explores the data mart and data warehouse architectures available on GitHub. Use the IPython shell and Jupyter notebooks for exploring and computing. Learn basic and advanced features in NumPy (Numerical Python) Get started with data analysis tools in the pandas library Use flexible tools to load, clean, transform, merge, and reshape data Create informative visualizations with matplotlib Apply the pandas groupby facility to slice, dice, and summarize datasets Analyze and manipulate regular and irregular time series data Learn how to solve real-world data analysis problems with thorough, detailed examples

The practical e-guide that gives you the skills to succeed as a project manager. Discover how to improve your project management skills by defining a project brief, identifying stakeholders, and building a strong team. You'll also learn useful tips for initiating projects, setting deadlines, and managing your budgets. Essential Managers gives you a practical "how-to" approach with step-by-step instructions, tips, checklists, and "ask yourself!" features showing you how to focus your energy, manage change, and make an impact. DK's Essential Managers series contains the knowledge you need to be a more effective manager and hone your management style. Whether you're new to project management or simply looking to sharpen your existing skills, this is the e-guide for you.

Mastering Microsoft Power BI
Discovering, Analyzing, Visualizing and Presenting Data
Project Management for Humans
Agile Analytics
Beginning Software Engineering
Business Intelligence Systems Using Scrum
Project Management Metrics, KPIs, and Dashboards

Winner of the Shingo Publication Award Accelerate your organization to win in the marketplace. How can we apply technology to drive business value? For years, we've been told that the performance of software delivery teams doesn't matter?that it can't provide a competitive advantage to our companies. Through four years of research, data, and case studies, IT specialists collected from the State of DevOps reports conducted with Puppet, Dr. Nicole Forsgren, Jez Humble, and Gene Kim set out to find a way to measure software delivery performance?and what drives it using rigorous statistical methods. This book presents both the findings and the science behind that research, making the information accessible for readers to apply in their own organizations. Readers will discover how to measure the performance of their teams, and what capabilities they should invest in to drive higher performance. This book is ideal for management at every level. The final edition of the Incomparable data warehousing and business intelligence reference, updated and expanded The Kimball Group Reader, Remastered Collection is the essential reference for data warehouse and business intelligence design, packed with best practices, design tips, and valuable insight from industry pioneer Ralph Kimball and the Kimball Group. This Remastered Collection represents decades of expert advice and mentoring in data warehousing and business intelligence, and is the final work to be published by the Kimball Group. Organized for quick navigation and easy reference, this book contains nearly 20 years of experience on more than 300 topics, all fully up-to-date and expanded with 65 new articles. The discussion covers the complete data warehouse/business intelligence lifecycle, including project planning, requirements gathering, system architecture, dimensional modeling, ETL, and business intelligence analytics, with each group of articles prefaced by original commentaries explaining their role in the overall Kimball Group methodology. Data warehousing/business intelligence industry's current multi-billion dollar value is due in no small part to the contributions of Ralph Kimball and the Kimball Group. Their publications are the standards on which the industry is built, and nearly all data warehouse hardware and software vendors have adopted their methods in one form or another. This book is a compendium of Kimball Group expertise, and an essential reference for anyone in the field. Learn data warehousing and business intelligence from the field's pioneers Get up to date on best practices and essential design tips Gain valuable knowledge on every stage of the project lifecycle Dig into the Kimball Group methodology with hands-on guidance Ralph Kimball and the Kimball Group have continued to refine their methods and techniques based on thousands of hours of consulting and training. This Remastered Collection of The Kimball Group Reader represents their final body of knowledge, and is nothing less than a vital reference for anyone involved in the field. Design, create and manage robust Power BI solutions to gain meaningful business insights Key Features Master all the dashboarding and reporting features of Microsoft Power BI Combine data from multiple sources, create stunning visualizations and publish your reports across multiple platforms A comprehensive guide with real-world use cases and examples demonstrating how you can get the best out of Microsoft Power BI Book Description This book is intended for business intelligence professionals responsible for the design and development of Power BI content as well as managers, architects and administrators who oversee Power BI content and deployment. The planning of a Power BI project through the development and distribution of content to the administration of Power BI for an organization. BI developers will learn how to create sustainable and impactful Power BI datasets, reports, and dashboards. This includes connecting to data sources, shaping and enhancing source data, and developing an analytical data model. Additionally, top report and dashboard design practices are described using features such as Bookmarks and the Power BI visual. BI managers will learn how Power BI's tools work together such as with the On-premises data gateway and how content can be staged and securely distributed via Apps. Additionally, both the Power BI Report Server and Power BI Premium are reviewed. By the end of this book, you will be confident in creating effective charts, tables, reports or dashboards for any kind of data using the tools and techniques in Microsoft PowerBI. What you will learn Build efficient data retrieval and transformation processes with the Power Query M Language Design scalable, user-friendly DirectQuery and Import Data Models Develop visually rich, immersive, and interactive reports and dashboards Maintain version control and stage deployments across development, test, and production environments Manage and monitor the Power BI Service and the On-premises data gateway Develop a fully on-premise solution with the Power BI Report Server Scale up a Power BI solution via Power BI Premium capacity and migration to Azure Analysis Services or SQL Server Analysis Services Who this book is for Business Intelligence professionals and existing Power BI users looking to master Power BI for all their data visualization and dashboarding needs will find this book to be useful. While understanding of the basic BI concepts is required, some exposure to Microsoft Power BI is helpful.

Building upon his earlier book that detailed agile data warehousing programming techniques for the Scrum master, Ralph's latest work illustrates the agile interpretations of the remaining software engineering disciplines: Requirements management benefits from streamlined templates that not only define projects quickly, but ensure nothing essential is overlooked. Data engineering receives two new "hybrid modeling" techniques, yielding data warehouses that can be easily adapted when requirements change without having to invest in rounously expensive data-conversion programs. Quality assurance advances with not only a stereoscopic top-down and bottom-up planning method, but also the incorporation of the latest in automated test engines. Use this step-by-step guide to deepen your own application development skills through self-study, show your teammates the world's fastest and most reliable techniques for creating business intelligence systems, or ensure that the IT department working for you is building your next decision support system the right way. Learn how to quickly define scope and architecture before programming starts Includes techniques of process and data engineering that enable iterative and incremental delivery Demonstrates how to plan and execute quality assurance plans and includes a guide to continuous integration and automated regression testing Presents program management strategies for coordinating multiple agile data mart projects so that over time an enterprise data warehouse emerges Use the provided 120-day road map to establish a data warehousing program

Big Data, Analytics, and the Future of Marketing & Sales
Data Warehousing, Analytics, and Machine Learning at Scale

Microsoft PowerPivot for Excel 2010
Delivering World-class Business Intelligence Systems Using Scrum and XP
Collaborative Dimensional Modeling, from Whiteboard to Star Schema
Building a Scalable Data Warehouse with Data Vault 2.0

Work with petabyte-scale datasets while building a collaborative, agile workplace in the process. This practical book is the canonical reference to Google BigQuery, the query engine that lets you conduct interactive analysis of large datasets. BigQuery enables enterprises to efficiently store, query, ingest, and learn from their data in a convenient framework. With this book, you'll examine how to analyze data at scale to derive insights from large datasets efficiently. Vallappa Lakshmanan, tech lead for Google Cloud Platform, and Jordan Tigan, engineering director for the BigQuery team, provide best practices for modern data warehousing within an autoscaled, serverless public cloud. Whether you want to explore parts of BigQuery you're not familiar with or prefer to focus on specific tasks, this reference is indispensable. Provides a variety of ideas, techniques, and strategies for effective software development.

An introductory, yet comprehensive, database textbook intended for use in undergraduate and graduate information systems database courses. This text also provides practical content to current and aspiring information systems, business data analysis, and decision support industry professionals. Database Systems: Introduction to Databases and Data Warehouses covers both analytical and operations database as knowledge of both is integral to being successful in today's business environment. It also provides a solid theoretical foundation and hands-on practice using an integrated web-based data-modeling suite.

Microsoft PowerPivot for Excel 2010: Give Your Data Meaning introduces PowerPivot in Excel 2010 to power users and data analysts who want to give their data meaning by creating their own Business Intelligence models. And with Microsoft Excel 2010: Data Analysis and Business Modeling, you'll learn the best ways to use Office Excel 2010 for data analysis and business modeling. Award-winning professor and statistician Wayne Winston shares practical examples to help you transform data into bottom-line results. Web site includes practice files. The two books included in this kit are: 9780735640580 Microsoft PowerPivot for Excel 2010 9780735643369 Microsoft Office Excel 2007: Data Analysis and Business Modeling, 3E

Data Architecture: A Primer for the Data Scientist
Database Systems
Systems Analysis and Design in a Changing World

Hadoop For Dummies
Google BigQuery: The Definitive Guide
Agile Data Warehousing Project Management

Accelerate
You have a rigor of good data architecture at the speed of agile? Then this is the missing link - your step-by-step guide to Data Vault success. Succeed with the Data Vault starts with the business and ends with the business. Sure, there's some technical stuff in the middle, and it is absolutely essential - but it's not sufficient on its own. This book will help you shape the business perspective, and weave it into the more technical aspects of Data Vault modeling. You'll read the foundational books and get courses, but one massive risk still remains. Dan Linstedt, the founder of the Data Vault, very clearly directs those building a Data Vault, very clearly directs those building a Data Vault with its design on an "enterprise's ontology". And Hans Hultgren similarly stresses the importance of the business concepts model. So it's important. We get that. But: What on earth is an enterprise ontology/business concept model... cause I don't know if I've got one if I don't know what I'm looking for? If I can't find one, how do I get my hands on such a thing? Even if I have one of these wonderful things, how do I apply it to get the sort of Data Vault that's recommended? It's actually not as hard as some would fear to answer all of these questions, and it's certainly worth the effort. This book just might save you a world of pain. It's a supplement to other material on Data Vault modeling, but it's the vital missing link to finding simplicity for Data Vault success.
Using Agile methods, you can bring far greater innovation, value, and quality to any data warehousing (DW), business intelligence (BI), or analytics project. However, conventional Agile methods must be carefully adapted to address the unique characteristics of DW/BI projects. In Agile Analytics, Agile pioneer Ken Collier shows how to do just that. Collier introduces data-platform-agnostic Agile solutions for integrating infrastructures consisting of diverse operational, legacy, and specialty systems that mix commercial and custom code. Using working examples, he shows how to manage analytics development teams with widely diverse skill sets and how to support enormous and fast-growing data volumes. Collier's techniques offer optimal value whether your projects involve "back-end" data management, "front-end" business analysis, or both. Part I focuses on Agile project management techniques and delivery team coordination, introducing core practices that shape the way your Agile DW/BI project community can collaborate toward success Part II presents technical methods for enabling continuous delivery of business value at production-quality levels, including evolving superior designs; test-driven DW development; version control; and project automation Collier brings together proven solutions you can apply right now—whether you're an IT decision-maker, data warehouse professional, database administrator, business intelligence specialist, or database developer. With his help, you can mitigate project risk, improve business alignment, achieve better results—and have fun along the way.

Data is at the center of many challenges in system design today. Difficult issues need to be figured out, such as scalability, consistency, reliability, efficiency, and maintainability. In addition, we have an overwhelming variety of tools, including relational databases, NoSQL datastores, stream or batch processors, and message brokers. What are the right choices for your application? How do you make sense of all these buzzwords? In this practical and comprehensive guide, author Martin Kleppmann helps you navigate this diverse landscape by examining the pros and cons of various technologies for processing and storing data. Software keeps changing, but the fundamental principles remain the same. With this book, software engineers and architects will learn how to apply those ideas in practice, and how to make full use of data in modern applications. Peer under the hood of modern systems you use every day to see how they operate them more effectively Make informed decisions by identifying the strengths and weaknesses of different toolsets Navigate the trade-offs around consistency, usability, fault tolerance, and complexity Understand the distributed systems research upon which modern databases are built Peek behind the scenes of major online services, and learn from their architectures Data is just 'service' - the move to agile, thrived Discover 42 infinitely practical tips for succeeding with agile, right from the start! * Faves the road to success with a clear plan for creating and releasing software. * Works with any agile methodology, from XP to Scrum. * Practical, actionable, concrete tips for senior managers, program/project managers, developers, and product owners. * Eliminates 'buyer's remorse' associated with bumpy agile transitions, helping teams quickly build confidence and get results. Adopting agile looks easy - on paper! In reality, though, new agile teams encounter many unforeseen challenges. Some lose confidence in their ability to succeed; others muddle through, struggling to solve problems that others have already solved many times over. In this book Mitch Lacey brings together those solutions, helping new agile developers learn from others' experience quickly and painlessly. This engaging, realistic book systematically removes the pain of agile adoption, and breaks down the barriers to rapid success. The Scrum Field Guide is organized into 42 bite-size, practical tips - each supported with highly relevant real-world examples and case studies. Lacey presents a section of tips that apply to everyone on the agile team, from leaders to customers. Next, he offers sections specific to each role - including tips for management, program/project managers, team members, and product owners. Lacey answers the questions new agile adopters ask most often - including 'can I modify standard agile processes and still be agile?' and 'how on Earth can we release software within a short timeframe if we can't even do it in a long time that we're used to.' Along the way, he presents proven solutions for a wide variety of common problems - from prioritizing requirements to building release plans, creating workable software iterations to getting buy-in from skeptical executives.

A Comprehensive Guide for IT Professionals
The Next Frontier for Innovation, Competition, and Productivity
A Primer for the Data Scientist

Python for Data Analysis
Introduction to Databases and Data Warehouses
The Scrum Field Guide
The Elephant in the Fridge

Data Modeling Essentials, Third Edition, covers the basics of data modeling while focusing on developing a facility in techniques, rather than a simple familiarization with "the rules". In order to enable students to apply the basics of data modeling to real models, the book addresses the realities of developing systems in real-world situations by assessing the merits of a variety of possible solutions as well as using language and diagramming methods that represent industry practice. This revised edition has been given significantly expanded coverage and reorganized for greater reader comprehension even as it retains its distinctive hallmarks of readability and usefulness. Beginning with the basics, the book provides a thorough grounding in theory before guiding the reader through the various stages of applied data modeling and database design. Later chapters address advanced subjects, including business rules, data warehousing, enterprise-wide modeling and data management. It includes an entirely new section discussing the development of logical and physical modeling, along with new material describing a powerful technique for model verification. It also provides an excellent resource for additional lectures and exercises. This text is the ideal reference for data modelers, data architects, database designers, DBAs, and systems analysts, as well as undergraduate and graduate-level students looking for a real-world perspective. Thorough coverage of the fundamentals and relevant theory. Recognition and support for the creative side of the process. Expanded coverage of applied data modeling includes new chapters on logical and physical database design. New material describing a powerful technique for model verification. Unique coverage of the practical and human aspects of modeling, such as working with business specialists, managing change, and resolving conflict.

If you create, manage, operate, or configure systems running in the cloud, you're a cloud engineer—even if you work as a system administrator, software developer, data scientist, or site reliability engineer. With this book, professionals from around the world provide valuable insight into today's cloud engineering role. These concise articles explore the entire cloud computing experience, including foundations, architecture, and migration. You'll delve into security and compliance, operations and reliability, and software development. And examine networking, organizational culture, and more. You're sure to find 1, 2, or 97 things that inspire you to dig deeper and expand your own career. "Three Keys to Making the Right Multicloud Decisions," Brendan O'Leary "Serverless Bad Practices," Manases Jesuino Galindo Bello "Failing a Cloud Migration," Lee Achison "Treat Your Cloud Environment as If It Were On Premises," Iyana Garry "What Is Toil, and Why Are SREs Obsessed with It?," Zachary Nickens "Lean QA: The QA Evolving in the DevOps World," Theresa Neate "How Economics of Scale Work in the Cloud," Jon Moore "The Cloud Is Not About the Cloud," Ken Corless "Data Gravity: The Importance of Data Management in the Cloud,"

The Data Vault was invented by Dan Linstedt at the U.S. Department of Defense, and the standard has been successfully applied to data warehousing projects at organizations of different sizes, from small to large-size corporations. Due to its simplified design, which is adapted from nature, the Data Vault 2.0 standard helps prevent typical data warehousing failures. "Building a Scalable Data Warehouse" covers everything one needs to know to create a scalable data warehouse end to end, including a presentation of the Data Vault modeling technique, which provides the foundations to create a technical data warehouse layer. The book discusses how to build the data warehouse incrementally using the agile Data Vault 2.0 methodology. In addition, readers will learn how to create the input layer (the stage layer) and the presentation layer (data mart) of the Data Vault 2.0 architecture including implementation best practices. Drawing upon years of practical experience and using numerous examples and an easy to understand framework, Dan Linstedt and Michael Olschmike discuss: How to load each layer using SQL Server Integration Services (SSIS), building automation of the Data Vault loading processes. Important data warehouse technologies and practices. Data Quality Services (DQS) and Master Data Services (MDS) in the context of the Data Vault architecture. Provides a complete introduction to data warehousing, applications, and the business context so readers can get-up-and running fast Explains theoretical concepts and provides hands-on instruction on how to build and implement a data warehouse Demystifies data vault modeling with beginning, intermediate, and advanced techniques Discusses the advantages of the data vault approach over other techniques, also including the latest updates to Data Vault 2.0 and multiple improvements to Data Vault 1.0

More than a buzzword, agile is a powerful business tool for all. To the uninitiated, agile is a software development and project management process involving white boards, colored Post-it Notes, and stand-up meetings. It may seem as though agile doesn't and won't ever apply to you. But agile is here to stay, and its benefits can be realized beyond IT and project management into other areas of your business. If you're a leader, it's worth exploring how your group can benefit from the higher productivity and morale agile brings. Agile: The Insights You Need from Harvard Business Review brings you today's most essential thinking on agile, from exploring the conditions under which agile is most effective and easiest to implement to reducing new-product development risk to bringing the most valuable products and features to market faster and more profitably. The lessons in this book will help you introduce agile into a broader range of activities and accelerate profitable growth for your company. Business is changing. Will you adapt or be left behind? Get up to speed and deepen your understanding of the topics that are shaping your company's future with the Insights You Need from Harvard Business Review series. Featuring HBR's smartest thinking on fast-moving issues—blockchain, cybersecurity, AI, and more—each book provides the foundational introduction and practical case studies your organization needs to compete today and collect the best research, interviews, and analysis to get it ready for tomorrow. You can't afford to ignore how these issues will transform the landscape of business and society. The Insights You Need series will help you grasp these critical ideas—and prepare you and your company for the future.

The Science of Lean Software and DevOps: Building and Scaling High Performing Technology Organizations

Data Science and Big Data Analytics
The Data Warehouse Toolkit
System Engineering Analysis, Design, and Development

Big Data
More Agile Testing
Construction Extension to the PMBOK® Guide
Over the past 5 years, the concept of big data has matured, data science has grown exponentially, and data architecture has become a standard part of organizational decision-making. Throughout all this change, the basic principles that shape the architecture of data have remained the same. There remains a need for people to take a look at the "bigger picture" and to understand where their data fit into the grand scheme of things. Data Architecture: A Primer for the Data Scientist, Second Edition addresses the larger architectural picture of how big data fits within the existing information infrastructure or architecture, there cannot be used to their full potential. This is an essential topic not only for data scientists, analysts, and managers but also for researchers and engineers who increasingly need to deal with large and complex sets of data. Until data are gathered and can be placed into an existing framework or architecture, they cannot be used to their full potential. Drawing upon years of practical experience and using numerous examples and case studies from across various industries, the authors seek to explain this larger picture into which big data fits, giving data scientists the necessary context for how pieces of the puzzle should fit together. New case studies and expanded coverage of textual management and analytics New focus on visualization and big data discussion of new visualizations of the end-state architecture Contains a six-step plan for starting new warehouse projects and guiding programmers step-by-step until they become a world-class, Agile development team. It describes also how to avoid or contain the fierce opposition that radically new methods can encounter from the traditionally-minded IS departments found in many large companies.

Summary Introducing Data Science teaches you how to accomplish the fundamental tasks that occupy data scientists. Using the Python language and common Python libraries, you'll experience firsthand the challenges of dealing with data at scale and gain a solid foundation in data science. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Many companies need developers with data science skills to work on projects ranging from social media marketing to machine learning. Discovering what you need to learn to begin a career as a data scientist can seem bewildering. This book is designed to help you get started. About the Book Introducing Data ScienceIntroducing Data Science explains vital data science concepts and teaches you how to accomplish the fundamental tasks that occupy data scientists. You'll explore data visualization, graph databases, the use of NoSQL, and data science in the cloud. You'll use the Python language and common Python libraries as you experience firsthand the challenges of dealing with data at scale. Discover how Python allows you to gain insights from data sets so big that they need to be stored on multiple machines, or from data moving so quickly that no single machine can handle it. This book gives you hands-on experience with the most popular Python data science libraries, Scikit-learn and StatsModels. After reading this book, you'll have the solid foundation you need to start a career in data science. What's Inside Handling large data Introduction to machine learning Using Python to work with data Writing data science algorithms About the Reader This book assumes you're comfortable reading code in Python or a similar language, such as C, Ruby, or JavaScript. No prior experience with data science is required. About the Authors Davy Clélen, Arno D. B. Meysman, and Mohamed Ali are the founders and managing partners of Optimately and Malton, where they focus on developing data science projects and solutions in various sectors. Table of Contents Data Science in a Big Data World The data science process Machine learning Handling large data on a single computer First steps in big data Join the NoSQL movement The rise of graph databases Text mining and text analytics Data visualization to the end user

Praise for the first edition: "This excellent text will be useful to every system engineer (SE) regardless of the domain. It covers ALL relevant SE material and does so in a very clear, methodical fashion. The breadth and depth of the author's presentation of SE principles and practices is outstanding." —Philip Allen "This book is a comprehensive guide to the engineering analysis, design, and development of an integrated set of concepts, principles, practices, and methodologies. The methods presented in this text apply to any type of human system — small, medium, and large organizational systems and system development projects delivering engineered systems overviews across multiple business sectors such as medical, transportation, financial, educational, governmental, aerospace and defense, utilities, political, and charity, among others. Provides a common focal point for "bridging the gap" between Unified System Users, System Acquirers, multi-discipline System Engineering, and Project, Functional, and Executive Management education, knowledge, and decision-making for developing systems, products, or services Each chapter provides definitions of key terms, guiding principles, examples, author's notes, real-world examples, and exercises, which highlight and reinforce key SE concepts and practices Addresses concepts employed in Model-Based Systems Engineering (MBSE), Model-Driven Design (MDD), Unified Modeling Language (UML/TM) / Systems Modeling Language (SysML/TM), and Agile/Spiral/V-Model Development such as user needs, stories, and use cases analysis; specification development; system architecture development; User-Centric System Design (UCSD); interface definition & control; system integration & test; and Verification & Validation (V&V) Highlights/introduces a new 21st Century Systems Engineering & Development (SE&D) paradigm that is easy to understand and implement. Provides practices that are critical stagingpoints for technical decision making such as Technical Strategy Development; Life Cycle requirements; Phases, Modes, & States; SE Process; Requirements Derivation; System Architecture Development, User-Centric System Design (UCSD); Engineering Standards, Coordinate Systems, and Conventions; et al. Thoroughly illustrated, with end-of-chapter exercises and numerous case studies and examples. Systems Engineering Analysis, Design, and Development, Second Edition is a primary textbook for multi-discipline, engineering, system analysis, and project management undergraduate/graduate level students and available reference for professionals.

Guided Steps to Data Vault Success Through Building Business-Centered Models
Learning Journeys for the Whole Team

Dynamics of Software Development
Big data, machine learning, and more, using Python tools
A Guide to Measuring and Monitoring Project Performance

Agile Data Warehousing
Designing Data-Intensive Applications

Janet Gregory and Lisa Crispin pioneered the agile testing discipline with their previous work, Agile Testing. Now, in More Agile Testing, they reflect on all they've learned since. They address crucial emerging issues, share evolved agile practices, and cover key issues agile testers have asked to learn more about. Packed with new examples from real teams, this insightful guide offers detailed information about adapting agile testing for your environment; learning from experience and continually improving your test processes; scaling agile testing across teams; and overcoming the pitfalls of automated testing. You'll find brand-new coverage of agile testing for the enterprise, distributed teams, mobile/embedded systems, regulated environments, data warehouse/BI systems, and DevOps practices. You'll come away understanding • How to clarify testing activities within the team • Ways to collaborate with business experts to identify valuable features and deliver the right capabilities • How to design automated tests for superior reliability and easier maintenance • How agile team members can improve and expand their testing skills • How to plan "just enough," balancing small increments with larger feature sets and the entire system • How to use testing to identify and mitigate risks associated with your current agile processes and to prevent defects • How to address challenges within your product or organizational context • How to perform exploratory testing using "personas" and "tours" • Exploratory testing approaches that engage the whole team, using test charters with session- and thread-based techniques • How to bring new agile testers up to speed quickly-without overwhelming them Janet Gregory is founder of DragonFire Inc., an agile quality process consultancy and training firm. Her passion is helping teams build quality systems. For almost fifteen years, she has worked as a coach and tester, introducing agile practices into companies of all sizes and helping users and testers understand their agile roles. She is a frequent speaker at agile and testing software conferences, and is a major contributor to the agile testing community. Lisa Crispin, an experienced agile testing practitioner and coach, regularly leads conference workshops on agile testing and contributes frequently to agile software publications. She enjoys collaborating as part of an awesome agile team to produce quality software. Since 1982, she has worked in a variety of roles on software teams, in a wide range of industries. She joined her first agile team in 2000 and continually learns from other teams and practitioners.

A complete introduction to building robust and reliable software Beginning Software Engineering demystifies the software engineering methodologies and techniques that professional developers use to design and build robust, efficient, and consistently reliable software. Free of jargon and assuming no previous programming, development, or management experience, this accessible guide explains important concepts and techniques that can be applied to any programming language. Each chapter ends with exercises that let you test your understanding and help you elaborate on the chapter's main concepts. Everything you need to understand waterfall, Sashimi, agile, RAD, Scrum, Kanban, Extreme Programming, and many other development models is inside! Describes in plain English what software engineering is Explains the roles and responsibilities of team members working on a software engineering project Outlines key phases that any software engineering effort must handle to produce applications that are powerful and dependable Details the most popular software development methodologies and explains the different ways they handle critical development tasks Incorporates exercises that expand upon each chapter's main ideas Includes an extensive glossary of software engineering terms

Let Hadoop For Dummies help harness the power of your data and rein in the information overload Big data has become big business, and companies and organizations of all sizes are struggling to find ways to retrieve valuable information from their massive data sets with becoming overwhelmed. Enter Hadoop and this easy-to-understand For Dummies guide. Hadoop For Dummies helps readers understand the value of big data, make a business case for using Hadoop, navigate the Hadoop ecosystem, and build and manage Hadoop applications and clusters. Explains the origins of Hadoop, its economic benefits, and its functionality and practical applications Helps you find your way around the Hadoop ecosystem, program MapReduce, utilize design patterns, and get your Hadoop cluster up and running quickly and easily Details how to use Hadoop applications for data mining, web analytics and personalization, large-scale text processing, data science, and problem-solving Shows you how to improve the value of your Hadoop cluster, maximize your investment in Hadoop, and avoid common pitfalls when building your Hadoop cluster From programmers challenged with building and maintaining affordable, scalable data systems to administrators who must deal with huge volumes of information effectively and efficiently, this how-to has something to help you with Hadoop.

Geared to IT professionals eager to get into the all-important field of data warehousing, this book explores all topics needed by those who design and implement data warehouses. Readers will learn about planning requirements, architecture, infrastructure, data preparation, information delivery, implementation, and maintenance. They'll also find a wealth of industry examples garnered from the author's 25 years of experience in designing and implementing databases and data warehouse applications for major corporations. Market: IT Professionals, Consultants.

The Complete Guide to Dimensional Modeling

The Unified Star Schema: An Agile and Resilient Approach to Data Warehouse and Analytics Design

97 Things Every Cloud Engineer Should Know

The Big Ideas Behind Reliable, Scalable, and Maintainable Systems

Agile Data Warehousing for the Enterprise

Data Warehousing Fundamentals

Successful Business Intelligence: Secrets to Making BI a Killer App

Harold Kerzner's essential strategies on measuring project management performance With the growth of complex projects, stakeholder involvement, and advancements in visual-based technology, metrics and KPIs (key performance indicators) are key factors in evaluating project performance. Dashboard reporting systems provide accessible project performance data, and sharing this vital data in a concise and consistent manner is a key communication responsibility of all project managers. This third edition of Kerzner's groundbreaking work, Project Management Metrics, KPIs, and Dashboards: A Guide to Measuring and Monitoring Project Performance, helps functional managers gain a thorough grasp of what metrics and KPIs are and how to use them. Plus, this edition includes new sections on processing dashboard information, portfolio management PMO and metrics, and BI tool flexibility. • Offers comprehensive coverage of the different dashboard types, design issues, and applications Provides full-color dashboards from some of the most successful project management companies, including IBM, Microsoft, and others Aligns with PMI's PMBOK® Guide and stresses value-driven project management PPT decks are available by chapter and a test bank will be available for use in seminar presentations and courses Get ready to bolster your awareness of what good metrics management really entails today—and be armed with the knowledge to measure performance more effectively.

A Guide to the Project Management Body of Knowledge (PMBOK® Guide) provides generalized project management guidance applicable to most projects most of the time. In order to apply this generalized guidance to construction projects, the Project Management Institute has developed the Construction Extension to the PMBOK® Guide. This Construction Extension provides construction-specific guidance for the project management practitioner for each of the PMBOK® Guide Knowledge Areas, as well as guidance in these additional areas not found in the PMBOK® Guide: • All project resources, rather than just human resources • Project health, safety, security, and environmental management • Project financial management, in addition to cost • Management of claims in construction This edition of the Construction Extension also follows a new structure, discussing the principles in each of the Knowledge Areas rather than discussing the individual processes. This approach broadens the applicability of the Construction Extension by increasing the focus on the "what" and "why" of construction project management. This Construction Extension also includes discussion of emerging trends and developments in the construction industry that affect the application of project management to construction projects.

Project management—it's not just about following a template or using a tool, but rather developing personal skills and intuition to find a method that works for everyone. Whether you're a designer or a manager, Project Management for Humans will help you estimate and plan tasks, scout and address issues before they become problems, and communicate with and hold people accountable.

A Value-driven Approach to Business Intelligence and Data Warehousing

Introducing Data Science

Helping People Get Things Done